The purpose of this catalog is to provide students and their academic advisors with a general description of Furman University along with detailed information regarding the curricula offered by Furman. Because educational processes change, the information and educational requirements represent a flexible program which may be altered at any time by Furman University.

The provisions of this catalog do not constitute an offer for a contract which may be accepted by students through the process of registration and enrollment at Furman. FURMAN UNIVERSITY RESERVES THE RIGHT TO CHANGE, WITHOUT NOTICE, ANY FEE, PROVISION, POLICY, PROCEDURE, OFFERING, OR REQUIREMENT IN THIS CATALOG AND TO DETERMINE WHETHER A STUDENT HAS SATISFACTORILY MET FURMAN'S REQUIREMENTS FOR ADMISSION OR THE AWARD OF A DEGREE.

Furman University is committed to providing equal access to its educational programs, activities, and facilities to all otherwise qualified students without discrimination on the basis of race, national origin, color, creed, religion, sex, age, disability, veteran status, sexual orientation, gender identity, or any other category protected by applicable state or federal law. An Equal Opportunity employer, Furman also affirms its commitment to nondiscrimination in its employment policies and practices. In compliance with Title IX (20 U.S.C Sec. 1681 et seq.) Furman University prohibits sex discrimination, including sexual harassment. For student related disability discrimination concerns, contact the Disability Services Coordinator, 864-294-2320, 3300 Poinsett Hwy, Greenville, SC 29613. For all other concerns, including any arising under Title IX, contact the Assistant Vice President for Human Resources, who is also Furman’s Title IX Coordinator, at 864-294-3730, 3300 Poinsett Hwy, Greenville, SC 29613.

A fully searchable electronic version of this catalog is available through the Furman web site at www.furman.edu/catalog.
# Contents

## Introducing Furman / 4

### Academic Programs / 8
- Degrees / 8
- Academic Advising / 8
- First Year Seminars / 8
- General Education / 9
- Cultural Life Program / 9
- Major Field of Study / 9
- Individualized Curriculum Program / 9
- Interdisciplinary Minors / 9
- Study Away Programs / 11
- Independent Study / 12

- Research and Internships / 12
- Teacher Education Program / 12
- Pre-professional Programs / 12
- Other Professional Programs / 13
- ROTC / 13
- Academic Calendar / 14
- May Experience / 14
- Summer Sessions / 14
- Continuing Education / 14
- Graduate Studies / 14

### Student Life / 15
- Student Government Association / 15
- Activities and Programs / 15
- Athletics / 17
- Cultural Opportunities / 17

- Student Organizations / 18
- Student Services / 20
- Student Rights and Regulations / 21

### Admission and Financing / 23
- Admission / 23
- Expenses / 26
- Financial Aid / 33

### Academic Regulations / 43
- Academic Integrity / 43
- Requirements for the Bachelor’s Degree / 43
- General Education / 44
- Cultural Life Program / 47
- Major Field of Study / 47
- Graduation Honors / 48
- Advising and Registration / 48
- Individualized Instruction / 49
- Class Standing / 49
- Enrollment Status / 49
- Study Away / 49
- Course Overload / 50
- Course Auditing / 50
- Guest Learners / 50
- Credit by Examination / 50

- Class Attendance / 51
- Course Adjustments and Withdrawals / 51
- Examinations / 51
- Grading / 51
- Pass-No Pass Grading Option / 53
- Grade Reports / 54
- Dean’s List / 54
- Academic Probation / 54
- Repeating Courses / 55
- Transfer Credit / 55
- Leave of Absence / 55
- Withdrawal from the University / 56
- Transcripts of Student Records / 56
- Appeals / 56
Academic Departments and Courses of Instruction / 57

Anthropology Program / 59
Art / 61
Asian Studies / 64
Biology / 67
Business and Accounting / 73
Chemistry / 76
Classics / 81
   Greek Courses
   Latin Courses
Communication Studies / 85
Computer Science / 88
Earth and Environmental Sciences / 91
Economics / 96
Education / 99
   Geography Courses
English / 106
Health Sciences / 114
History / 117
Interdisciplinary Studies and Minors / 124
   Humanities Courses
   Science Courses
   African American and African Diaspora Cultures
   Minor
   Ancient Greek and Roman Studies Minor
   English for Speakers of Other Languages Minor
   Environmental Studies Minor
   Film Studies Minor
   Latin American Studies Minor
   Middle East and Islamic Studies Minor
   Poverty Studies Minor

Science Education Minor
Women’s, Gender and Sexuality Studies Minor
Mathematics / 134
Military Science / 137
Modern Languages and Literatures / 139
   Chinese Courses
   French Courses
   German Courses
   Hindi Course
   Italian Course
   Japanese Courses
   Linguistics Courses
   Modern Languages and Literatures Courses
   Spanish Courses
Music / 152
Neuroscience Program / 160
Philosophy / 161
Physics / 164
   Dual Degree Engineering Program
Political Science / 167
Psychology / 172
Religion / 175
Sociology / 181
Theatre Arts / 185
Urban Studies Program / 187

General Information / 188
Medals and Awards / 188
Enrollment Summary / 194

Directory / 195
Board of Trustees / 195
Advisory Council / 195
Alumni Board of Directors / 196
Officers of Administration / 197
Faculty / 197
Emeriti / 206
Administrative and Staff Personnel / 208
Intercollegiate Athletics Staff / 211
University Medical Services / 212
Correspondence / 213

Calendar / 214
Introducing Furman

Furman University is a selective, independent, coeducational liberal arts college of 2,700 students located at the base of the Blue Ridge mountains on a 750-acre campus in Greenville, South Carolina. Furman provides a distinctive undergraduate education encompassing the humanities, fine arts, social sciences, mathematics and the natural sciences, and selected professional disciplines. Furman emphasizes engaged learning, a problem-solving, project-oriented and research-based educational philosophy that encourages students to put into practice the theories and methods learned from texts or lectures. The university is committed to liberal learning within a moral and ethical context.

History

Furman University is named for Richard Furman (1755-1825), a prominent pastor in Charleston, South Carolina, who was president of the nation’s first Baptist Convention and a leader in Baptist higher education.

The university traces its roots to two academies established in the early nineteenth century: the Greenville Female Academy, a part of the Greenville Academy, was chartered in 1820; the Furman Academy and Theological Institution for men was founded in 1826 by the South Carolina Baptist Convention in Edgefield, South Carolina.

During its early decades, the Furman Academy moved first to Stateburg, then to Winnsboro, South Carolina. In 1850, the school was chartered as Furman University and moved to Greenville. Eight years later its theological department became the Southern Baptist Theological Seminary, which eventually moved to Louisville, Kentucky. Between 1920 and 1932 the university included a law school, but for most of its history Furman has operated as a liberal arts college. In 1854, the Greenville Baptist Female College opened on the campus of the Greenville Academy. It was governed by Furman’s board of trustees until 1908, when it acquired its own board. In 1916, it became the Greenville Woman’s College.

Furman was accredited in 1924 by the Southern Association of Colleges and Schools, and during that same year the university became a beneficiary of The Duke Endowment established by James Buchanan Duke. In 1933, Furman and the Greenville Woman’s College were coordinated under a single president and board.

Furman broke ground for a new campus five miles north of Greenville in 1953, and five years later held its first classes on the present site. Furman received a chapter of Phi Beta Kappa in 1973. In 1992, formal ties with the South Carolina Baptist Convention ended, and the university became independent. Today, Furman University is among the leading liberal arts institutions in the nation.

Mission

The primary mission of Furman as a liberal arts institution is to provide a distinctive undergraduate education encompassing humanities, fine arts, social sciences, mathematics and the natural sciences, and selected professional disciplines. In addition to its primary emphasis on undergraduate education, Furman offers graduate programs in education and chemistry. The university also provides a continuing education program for the larger Greenville community. At the heart of the undergraduate program are the general education requirements. The requirements ensure that all undergraduates will be introduced to the major methods of inquiry that characterize liberal study. In accordance with the traditional assumptions of liberal education, both out-of-class and in-class experiences are designed to develop the whole person — intellectually, physically, socially, emotionally, and spiritually. Furman seeks highly motivated students with inquisitive minds, varied perspectives, a sense of personal integrity and moral responsibility with the potential to be leaders and to make future contributions to society.

Values

Founded by Baptists and grounded in Judeo-Christian values, Furman challenges students, faculty, and staff to grow both in knowledge
and in faith. The university values excellent teaching and close student-faculty relationships. Small classes, individual instruction, empathetic advising, and personal attention promote active learning and cultivate intellectual curiosity. The university encourages its students to engage ethical issues and to explore spiritual concerns. Furman manifests its respect for the ethical and spiritual dimensions of human experience in many ways. Within the curriculum, these dimensions are often integral to academic disciplines and form the basis for classroom discussions. Outside the classroom, the ethical and spiritual dimensions are expressed in an active chaplaincy and a program in church-related vocations, an array of vital student religious organizations, and a nationally recognized community service program.

Furman aspires to be a diverse community of women and men of different races, religions, geographic origins, socioeconomic backgrounds, personal characteristics, and interests. This diversity reflects values the university hopes to embody: openness, honesty, tolerance and mutual respect, civic responsibility, global awareness, and bold intellectual inquiry. These values foster a critical examination of inherited assumptions, even as they protect freedom of expression and the open exchange of ideas. In sum, Furman University aspires to be a diverse community of learning, harmonious in its differences, just and compassionate in its transactions, and steadfast in its commitment to an educational program of the highest quality.

Integrity Pledge

It is the desire of Furman University to unite its members in a collective commitment to integrity. In so doing, Furman University strives to teach its members to live lives of humility, respect, and responsibility. Therefore, it is the expectation that all members of the Furman University community will conduct themselves with integrity in all endeavors. In honoring these values and ideals as Furman University’s foundation, it is with the utmost faithfulness and dignity that I will subscribe to them.

An Engaged Approach to Liberal Learning

Furman University enriches traditional liberal arts education by offering students an array of opportunities to learn by doing. While grounding its curriculum in the humanities, fine arts, and sciences, Furman offers courses in fields that are more professionally oriented: business administration, accounting, education, health sciences, and music performance. In addition, Furman emphasizes education outside the traditional classroom, providing opportunities for students to put into practice the theories and methods learned from texts or lectures. For example, Furman has become a national leader in undergraduate research and collaborative research projects involving students and professors. Engaged learning takes additional forms at Furman. A significant number of Furman students participate in internships. Others serve as teaching apprentices on campus or in elementary and secondary schools. A large number enroll in study away programs sponsored by the university while many work as volunteers for social service agencies or other helping programs in the Greenville community. For many Furman students, these out-of-class opportunities become life-changing experiences. By supplementing classroom instruction with opportunities for collaborative research and off campus learning, Furman aims to give students greater responsibility for their education, to develop their self-confidence, and to sharpen their leadership skills.

The Furman Curriculum

Furman nurtures a commitment to independent thought and lifelong learning. By providing students with a broad exposure to the liberal arts, it seeks to produce graduates grounded in the traditional sources of knowledge yet capable of devising new solutions to problems in their chosen field. At the core of Furman’s educational mission, the curriculum is dedicated to the following ideals of liberal learning:

- Invigoration and stimulation of intellectual curiosity,
• Broad preparation in a diverse set of disciplines, including the humanities, natural sciences, social sciences, and the fine arts,
• Intellectual inquiry in sufficient depth to allow one to contribute to a greater body of knowledge;
• Development of expressive capabilities in writing, speaking, and the arts,
• Cultivation of world citizenship—an understanding of those not like oneself, and
• Integration of knowledge into a meaningful synthesis.

Accreditation

Furman University is accredited to award bachelor’s, master’s and education specialist degrees by the Southern Association of Colleges and Schools, Commission on Colleges, 1866 Southern Lane, Decatur, Georgia 30033-4097. Their offices can be reached by telephone at (404) 679-4500.

Furman is a member of the Southern University Conference, Association of American Colleges and Universities, and South Carolina Association of Colleges, and is on the approved list of the American Chemical Society. The program in music is accredited by the National Association of Schools of Music. The Teacher Education Program is accredited by the National Council for Accreditation of Teacher Education.

Campus and Buildings

Furman University is situated in the scenic Carolina foothills, only five miles from Greenville, which offers the advantages of a city with a metropolitan population of nearly 500,000.

Since 1958, Furman has occupied a beautifully designed 750 acre campus with a 30 acre lake. A rose garden, Asian garden and many fountains add to the beauty of the campus. Most of the major buildings on campus are faced with handmade Virginia brick and many have columned porches adding a traditional architectural flavor to the latest in educational facilities.

First to be noted by visitors is McAlister Auditorium, site of many university and community sponsored performances. Adjoining it, the Homozel M. Daniel Music Building provides modern studios and performance rooms for Furman’s noted music department. Nearby, the Thomas Anderson Roe Art Building has a gallery for traveling exhibits and facilities for multimedia art instruction.

James C. Furman Hall, recently renovated, contains classrooms, seminar rooms, and departmental offices for the humanities, a language resource center, and a television studio. Other academic buildings surrounding the fountain adorned Milford Mall include John E. Johns Hall, housing facilities for a variety of social science disciplines, the Richard W. Riley Hall for Computer Science and Mathematics, and over 200,000 square feet of classrooms, laboratories, and other space dedicated to effective teaching and learning in the new state-of-the-art Charles H. Townes Center for Science.

Recent additions to the campus also include, the LEED green building certified, Herman N. Hipp Hall, an academic building; the Cherrydale Alumni House, the reclaimed home of James Clement Furman, the university’s first president; North Village, an apartment style residential complex; the Hartness Welcome Center for campus visitors and prospective students; and the Younts Conference Center.

The Furman University Libraries consists of the James B. Duke Library, the Maxwell Music Library, and the Science Library. The James B. Duke Library, located at the center of campus, was constructed in 1957. Expanded and renovated in 2004, the library includes group study rooms, media viewing rooms, and a 24-hour study and computing area. The library collection contains over 1.3 million items including 450,000 books,
over 15,000 print and online journals, 140,000 U.S. government documents and maps, and 800,000 microform documents. The library also provides access to over 100 research databases through its website. The Maxwell Music Media Center and Library brings together print, audio, and digital music resources in a facility built in 1998. Located in the Nan Trammell Herring Music Pavilion, this facility includes individual listening and viewing stations, a computer lab with MIDI capabilities at each station, and a multimedia seminar room. The Music Library collection consists of over 22,000 books and scores, 4,000 compact disks, and 65 current periodicals. The new Science Library was completed in August 2008. It houses specialized journals in the natural sciences, including Biology, Chemistry, Earth and Environmental Sciences, and Physics. It is located in the Townes Center for Science and provides access to a host of on-line and print resources.

A landmark of the campus is the Bell Tower, a gift from the family of Alester Garden Furman and replica of the tower of the Main Building on the former men’s campus in downtown Greenville. Its 48-bell carillon honors the late John Edwards Burnside, class of 1917. The Trone Student Center serves as a hub of student activities, complete with a Barnes & Noble bookstore, Starbucks’, post office, food court, and meeting rooms while the Charles E. Daniel Dining Hall provides student, faculty, staff and visitors to campus a healthy variety of dining options. The Herman W. Lay Physical Activities Center provides for an extensive curriculum in health sciences, as well as a full program of recreational and intramural sports.

The university’s commitment to intercollegiate athletic excellence is clearly evident in its physical plant as well, which features several new or renovated athletic facilities, including Pepsi Softball Stadium; Timmons Arena, the home court for the Furman men’s and women’s basketball teams; the Irwin Belk Complex for Track & Field; the REK Center for Intercollegiate Golf; Minor Herndon Mickel Tennis Center; Eugene Stone III Soccer Stadium; Alley Gymnasium, the home for Furman women’s volleyball program; and Paladin Football Stadium. Finally, Furman sports one of the nation’s finest on-campus golf courses, a nationally recognized cross country course, and the recently upgraded Latham Baseball Stadium nestled in one of the most pleasing settings in the Southern Conference.
Academic Programs

Academic programs at Furman University prepare qualified students to enter graduate and professional schools or to go directly into such fields as business, teaching and public service.

Degrees

Courses are offered leading to the award of the Bachelor of Arts, Bachelor of Music, Bachelor of Science, Bachelor of Liberal Arts, Master of Arts, and Master of Science degrees. See the Academic Regulations section of this catalog for specific requirements leading to the award of each degree.

The Bachelor of Arts degree is awarded in the following major subjects: accounting, art, Asian studies, biology, business administration, classics, communication studies, earth and environmental sciences, economics, education, English, French, German, Greek, information technology, health sciences, history, Latin, mathematics, mathematics-economics, music, philosophy, political science, psychology, religion, sociology, Spanish, theatre arts and urban studies.

The Bachelor of Music degree is available to students who wish a greater specialization in music than the Bachelor of Arts provides. It is awarded with majors in composition, performance, church music, music education and music theory.

The Bachelor of Science degree is awarded to students who desire a greater concentration in science or mathematics than the Bachelor of Arts affords. It is conferred in the following major subjects: biology, chemistry, computer science, computing and applied mathematics, earth and environmental sciences, health sciences, information technology, mathematics, mathematics-economics, neuroscience, physics, pre-engineering, psychology and sustainability science.

The Bachelor of Liberal Arts, designed for students in the Division of Continuing Education, offers majors in accounting and business administration.

The Master of Arts and Education Specialist degrees are awarded in education, while the Master of Science degree is awarded in chemistry.

Academic Advising

Every student is assigned an academic advisor with whom the student meets regularly to plan a program based on interests, aptitudes, and educational goals. The student has the final responsibility for making decisions about his or her academic program and for ensuring that degree requirements are satisfied.

The role of the advisor is to offer informed advice about course selections, provide information about co-curricular and extracurricular educational opportunities such as study away, internships, and undergraduate research, and refer the student to campus support services as appropriate.

First Year Seminars

The centerpiece of recent curricular reform at Furman, first year seminars are intended to ignite the interests and passions of students. Most seminars require little prior knowledge about a given academic discipline. Seminars encourage students to think, write, and speak with rigor and with passion about topics that matter. They treat the undergraduate classroom as an introduction to a set of problems—problems considered in a content-rich environment. Under these conditions, classroom activity can become a model for critical thought, controversy, and the posing of, and grappling with, hard questions. The seminars model a way of teaching and learning significantly different from the ordinary high school experience. They clearly expect a new level of responsibility for learning for every student.

Stimulating the mind for the pursuit of knowledge is the real heart of liberal education. The seminars should be understood as a chance to press into intellectual areas not easily accommodated in “introductory” courses. While these seminars certainly use the professional expertise of the faculty teaching them, their point is not to create
a new generation of specialists. Their point is to encourage clear, precise, informed, imaginative, engaged, and ethically sensitive thinking.

**General Education**

To acquire the breadth in educational experience which characterizes liberal education, develop intellectual discipline, discover their interests and build a foundation for specialization, students must successfully complete courses fulfilling a prescribed set of general education requirements. General education courses include a pair of first year seminars; core requirements in empirical studies, human cultures, mathematical and formal reasoning, foreign language, ultimate questions, and body and mind; and global awareness offerings focusing on humans and their natural environment and world cultures. See the Academic Regulations section of this catalog for more information.

**Cultural Life Program**

The Cultural Life Program is designed to supplement the educational experience offered at Furman. The program includes a broad selection of cultural events throughout the year — plays, lectures and concerts. See the Academic Regulations section of this catalog for more information.

**Major Field of Study**

All students select a major subject in which they normally complete at least eight courses.

**Individualized Curriculum Program**

Students who have educational goals outside of majors offered at Furman may propose an individualized curriculum program. Students approved for the program select courses under the supervision of a faculty committee and the student’s advisor. Individualized programs should be consistent with the broad purposes of Furman’s liberal arts philosophy. See the Academic Regulations section of this catalog for more information.

**Interdisciplinary Minors**

While Furman does not offer traditional minors housed in a single academic discipline, students may choose to supplement their major field of study by studying a specific topic from the perspective of different academic disciplines. To assist this effort, the university has identified certain groups of existing courses, the focus of each group being a specific area deemed appropriate for an interdisciplinary minor.

A minor typically consists of four to six courses (16 to 24 credits) of related course work. Furman offers interdisciplinary minors in African American and African Diaspora Cultures, Ancient Greek and Roman Studies, English for Speakers of Other Languages, Environmental Studies, Film Studies, Latin American Studies, Middle East and Islamic Studies, Poverty Studies, Science Education, and Women’s, Gender, and Sexuality Studies. A listing of courses and requirements for each minor is included in the Interdisciplinary Studies section of this catalog.

**African-American and African Diaspora Cultures**

The minor provides students with critical, theoretically informed engagements with the complex, ever-changing cultures, histories, politics, and status of the diverse peoples of African descent who live in and help shape the various societies outside of Africa. More specifically, it enables students to explore the complexity of the lives of people of African descent and the ways in which race, gender, social class and sexual identities are constituted not in isolation but by and through each other, the larger “mainstream,” and other immigrant formations.

**Ancient Greek and Roman Studies**

Ancient Greek and Roman Studies refers to those disciplines which study the culture, civilization and heritage of Greece and Rome from roughly the Bronze Age (3000-1000 B.C.) to the fifth century A.D., and those parts of the Mediterranean basin, Europe, Africa and Asia where these ancient civilizations either originated or spread. The minor includes disciplines that critically engage ideas and themes that originated in the
classical world and which profoundly influenced later thinkers and institutions.

**English for Speakers of Other Languages**
English is the “lingua franca” of the twenty-first century. It has become the international language of business, science, technology, and travel and is the most widely learned second language in the world today. The minor in English for Speakers of Other Languages will provide students with the opportunity to gain essential background knowledge, expertise and experience relevant not only for working with and assisting foreign nationals and immigrants both personally and professionally, but also for adult literacy development in the United States, teaching English overseas as a foreign language or in America as a second language.

**Environmental Studies**
Many of the problems that will face humanity in the 21st century will be environmental. The expanding human population and dwindling supplies of oil, water and arable land could de-stabilize economic, political and social institutions.

The minor in Environmental Studies offers a program of study that teaches participating students how the Earth functions as a system and supports life; how the growing human population is transforming this Earth system; the complex relationships between culture (social, political, religious, and economic systems) and the environment; and that solutions are constructed in this social context. The minor also provides a course experience in which students discover the interdisciplinary nature of environmental problem solving and work in teams to address environmental issues.

**Film Studies**
Focusing primarily on the study of the specificitifies of film language, its formal codes and conventions, the history of film and the established canon of theories and scholarly methods, the minor in Film Studies seeks to acknowledge and advance the critical understanding that emerges when film is studied within an interdisciplinary, liberal arts perspective. Students will encounter a wide range of methods and approaches, cinemas (national and international), forms (fiction, documentary, animation), and styles (Hollywood, independent, avant-garde and experimental) and will be challenged to look beyond the “visual” field to think about and critically engage the significance of the broader visual culture and the world.

**Latin American Studies**
Latin American Studies offers students a minor that complements their major and provides a broad perspective on Latin America. Topics of study include, but are not limited to literature, politics, history, society, ecology and the environment. Some courses are grounded in problem solving; others are oriented toward critical thinking.

**Middle East and Islamic Studies**
Middle East and Islamic Studies at Furman is rooted in the disciplinary methodologies of distinct fields of political science, history and religion. Students completing the minor will be equipped with interdisciplinary tools of analysis through an introduction to an increasingly complex and diverse part of the world. The courses contributing to the minor will help students recognize the connections between peoples and cultures of the region, and attempts to locate the significance of the Middle East and Islam in a global context.

**Poverty Studies**
Poverty is among the oldest and most intractable problems faced by humankind. Well over half the world lives in serious poverty, including tens of millions in wealthy countries. The minor in Poverty Studies brings students face-to-face with this reality. Students will study poverty locally, nationally and globally from a variety of academic disciplines, and they will engage poverty directly through a summer internship. The minor invites informed, critical conversations about what it means to live in poverty, causes of poverty, and how poverty might be addressed and alleviated through individual and institutional actions.
Science Education
The ability to communicate and respond to the general public is a vital skill for scientists. The goal of the Science Education minor is to explore the interactive link between the natural sciences and society and to prepare students to be able to help make science accessible to the general public. Students will complete field experiences in various local settings including undergraduate laboratories, state parks, schools, camps or science museums. The minor will prepare the students for a future that may include graduate school, preparation for teaching in the public or private sector, and/or employment as resource consultants in museums, state parks, or businesses.

Women’s, Gender, and Sexuality Studies
The minor provides a methodology for exploring the ways gender shapes knowledge throughout the academy and society. As such, it is an important branch of interdisciplinary knowledge often ignored in conventional curricula. Courses in Women’s, Gender, and Sexuality Studies examine not only women in specific contexts from multiple disciplinary perspectives, but also the various ways in which gender and sexuality shape human experience.

Study Away Programs
Furman offers qualified students a wide variety of opportunities to study internationally or participate in a number of thematic programs in locations throughout the United States either in Furman sponsored travel programs or through affiliate programs with other colleges and universities. Study away programs are competitive and range from short-term study during the May Experience to full semester programs during the fall and spring.

Travel study programs involve continuous study based at one location or in some instances travel across several countries. Participants in these programs are accompanied by Furman faculty members who coordinate and direct the programs. Directors ensure that field trips, experiential learning, and interaction with local experts are integrated into the curriculum for each program.

Fall semester programs are sponsored in the British Isles, with resident study in London and Stratford-upon-Avon; extensive language and literature study offered in Madrid, Paris and Bonn, Germany; while other fall term possibilities typically include Asian Studies offerings in China; a music program in Italy, internship experiences associated with a European Union institution in Brussels, Belgium, and a trip focusing on the issues of present-day Latin America. Spring term study abroad opportunities include travel study to the Mediterranean, the Baltic, Africa, Belize, Costa Rica, Ecuador, Chile and India. Internship based travel study programs on this continent are also available in Columbia, S.C., Washington, D.C., and with the Canadian Parliament in Ottawa.

Qualified students may also spend a term or more studying through affiliate programs. Opportunities for study in Australia and New Zealand exist through Furman’s association with Australearn, a consortium of 19 Australian and New Zealand universities. Students may arrange to spend a semester as an exchange student at Kansai Gaidai, Seinan Gakuin or Waseda Universities in Japan, Gröningen University in The Netherlands, Rhodes University in South Africa, or Soochow University in China. In cooperation with the University of Georgia, art students may spend a term in Cortona, Italy, while students interested in business administration may study through the CIMBA program in northern Italy. Study in mathematics is offered in Budapest and opportunities for internships or study in Edinburgh, Scotland and Northern Ireland are also available.

As a member of the Associated Colleges of the South (ACS), Furman also provides opportunities for students to participate in ACS programs based in Latin America or in consortial arrangements, such as the British Studies at Oxford program sponsored by Rhodes College. Students are also encouraged to consider junior year abroad programs offered by accredited schools and institutions such as the Institute of European Studies with which Furman is affiliated. Through formal agreements with other universities, Furman
also offers students the option of studying the Civil War era at Gettysburg College; participating in the United Nations program sponsored by Occidental College; spending a fall semester at the Duke University Marine Laboratory in Beaufort, North Carolina; or enrolling for an environmental science semester at the Marine Biological Laboratory in Woods Hole, Massachusetts.

Students interested in any of these study away opportunities should consult the Study Away and International Education website at www.furman.edu/international for more information. Application deadlines for most programs are typically at least as much as a year prior to the program start date.

Participation in study away programs is voluntary on the part of the student. Such releases as the university might promulgate must be signed in order to participate.

**Independent Study**

An integral part of the educational program at Furman is the opportunity for independent study. Independent study courses allow students, with faculty assistance, to develop their own goals and their own learning activities to study subject matter and topics that may not be part of regular course offerings. Independent study opportunities are offered in every academic department.

**Research and Internships**

Furman strongly supports programs which allow students to apply their in-class learning to a research or internship experience. Research projects offer students an opportunity to engage in original scholarship activity, usually in collaboration with a faculty member. These projects can take place either during the academic year or the summer. Students regularly engage in off-campus research. In the past, students have conducted off-campus projects at such places as the Centers for Disease Control and Prevention, University of Cambridge, Harvard University, Oak Ridge National Laboratory, and the Reedy and Saluda River basins.

An active internship program provides opportunities throughout the academic year and during the summer for students to integrate theory with practice and to explore future career possibilities. Internships may be developed through academic departments or with the Internship Program Director. Positions will be directly related to majors and may be either part-time or full-time. Recent internships have included positions at museums, government offices, business and financial institutions, hospitals and clinics, social service agencies and media companies.

Various fellowship and grant programs support a select group of students who undertake full-time research projects, creative activity, or internships each summer.

**Teacher Education Program**

The Education department offers a major in education with preparation for teaching in elementary grades 2-6 and a non-teaching major for those who wish to work with children or youth in settings other than schools. Students seeking certification on the secondary level or in grades PK-12 (languages) major in the academic discipline related to the teaching field and complete a sequence of pre-professional courses in education. The elementary, secondary and language programs of certification are completed on the graduate level during the fall of the fifth year. Graduate credits accrued during the post-baccalaureate year may be applied toward a master’s degree. The certification program in music education may be completed in four years. Additional areas of certification, completed on the graduate level, are offered in curriculum and instruction, early childhood, special education, literacy, school leadership, and teaching English to speakers of other languages.

**Pre-professional Programs**

Furman offers programs which prepare students for professional studies in law, theology, engineering and industrial management as well as health fields such as medicine, dentistry,
veterinary medicine, optometry, nursing, occupational therapy, pharmacy, physical therapy, and physician assistant, among others. Of course, Furman prepares students to enter any professional program that is based on a liberal arts education as well.

**Pre-ministry**
Furman provides opportunities for students who wish to prepare for the various aspects of Christian ministry. No particular major is required, although students interested in church related vocations frequently major in religion. Various courses, internships and engaged learning experiences help students explore their interest in and fitness for religious vocations. Counseling and guidance are offered through the Chaplains Office.

**Pre-medical**
Pre-medical and pre-dental students may pursue either of two programs. They may complete all requirements for a bachelor’s degree at Furman, or they may enter a medical or dental school after they have completed at least 96 credits at Furman. Students in both programs, however, are advised to take a fairly standard group of courses: two in biology, four in chemistry, two in mathematics, two in physics and two in English. Pre-dental students may need to complete additional coursework.

Those who complete all their degree requirements at Furman may major in any subject they wish, as long as they complete the courses listed above. Those interested in a career in veterinary medicine, optometry, osteopathy or podiatry generally complete the same courses as pre-medical and pre-dental students. Students interested in these programs should contact the health professions advisor.

**Pre-law**
The Association of Law Schools, to which most law schools belong, lists two objectives of undergraduate education for law students: first, the student should learn to reason logically; second, the student should learn to express thoughts clearly and concisely both orally and in writing. Both objectives are consistent with the liberal arts education Furman seeks to provide all students. Consult with the pre-law advisor for more information.

**Engineering**
Furman cooperates with Auburn University, Clemson University, Georgia Institute of Technology, North Carolina State University, the University of South Carolina and the University of Georgia in dual-degree programs in engineering, in which a student can qualify for a degree from both institutions after three years at Furman and two to three years at the second institution. Students in this program may major in either pre-engineering or physics. Students interested in this program should confer with the Dual Degree coordinator in Physics as early as possible to plan the Furman portion of their curriculum.

**Forestry and Environmental Management**
A student may obtain a dual degree in five years from Furman and Duke University’s Nicholas School of the Environment and Earth Sciences. Students interested in this program should consult a faculty member in Biology.

**Other Professional Programs**
Graduates of Furman’s programs in music and business administration are prepared to begin entry level professional positions. Graduates who are prepared to do so may wish to continue their studies in graduate school. Students in the Bachelor of Music program may prepare to be music educators, performers or church musicians. Students in business administration may prepare for careers in such areas as accounting, marketing and banking.

**ROTC**
Furman maintains a general military science program of the Senior Division, Reserve Officers’ Training Corps. The first two years of ROTC comprise the basic course; the last two years, including a five-week summer camp, comprise the advanced course. All students may take military science courses for elective credit. The ROTC
program is open to both women and men, and scholarships are available. Successful completion of the basic and advanced programs leads to a commission in the U.S. Army, Active or Reserve forces.

**Academic Calendar**

The academic year is comprised of two fifteen week semesters in the fall (August through December) and the spring (January through May). The May Experience provides students an opportunity to explore a specific area of intellectual interest during a three week period each May. Courses may also be offered in shorter time frames in addition to and overlapping the traditional academic calendar.

**May Experience**

An optional three-week term following commencement exercises in the spring semester, offerings during the May Experience include an assortment of engaging academic experiences that allow faculty and students to explore topics of mutual interest through both on-campus instruction and in faculty-led study away programs. Courses are unique in content, class activities, and scheduling from courses offered during the fall or spring semesters.

May Experience courses yield two credits and may not fulfill a general education requirement, nor can they be required for a major.

**Summer Sessions**

Furman operates a summer session with courses meeting in a variety of patterns between three and ten weeks. Undergraduates may enroll in up to 12 credits during this term. Summer study enables students to accelerate their degree program, enrich their program, or substitute for courses not completed during the academic year. For more information about summer at Furman, consult the web site: www.furman.edu/summer.

**Continuing Education**

Continuing Education offers a program that leads to the Bachelor of Liberal Arts degree. The program consists of general education courses, elective courses and major courses. Majors are available in accounting and business administration. For further information, consult the Director of Continuing Education or visit on the web at www.furman.edu/conted.

**Graduate Studies**

Furman University offers three graduate degrees. The Master of Science degree is offered in chemistry, while the Master of Arts and Education Specialist degree programs, offered through Education, include concentrations in a variety of areas.

For further information, contact the Director of Graduate Studies or visit on the web at www.furman.edu/gradstudies.
Student Life

A Furman education includes social, physical, cultural and spiritual growth as well as intellectual development. The leadership of the Student Government Association, the chaplains, and Student Life staff work together to help students on their journey.

Student Government Association

The Student Government Association (SGA) is Furman’s student-led governing body. SGA consists of various branches, each serving the student body in its own way. The Furman University Student Activities Board (FUSAB) coordinates a wide array of entertainment for students to enjoy. The Residential Life Council (RLC) serves as the primary liaison between students and the university housing and residence life staff striving to create a strong community among residents in campus housing. The Religious Council consists of a representative from each official religious organization and promotes inter-faith dialogue and events. The Recreational Sports and Intramural Councils oversee the creation and funding of all intramural and club sports teams.

SGA is comprised of representatives from all elements of the student body. Each class is represented by a President, Vice President, a Secretary and Treasurer. The SGA executive officers consist of the President, Vice President, Secretary and Treasurer. A Parliamentarian is also appointed to serve on the Council.

In addition to fulfilling its role as the coordinating body for SGA, the Council functions as the primary liaison between the faculty, administration, trustees and student body. All undergraduate students are members of the association, which is funded through a student government fee. The SGA Council conducts its business each Monday evening in open meetings. Student Life staff serve as advisors to SGA.

Activities and Programs

Student Activities & the Trone Student Center

The Trone Student Center is the focal point for students to become involved in campus life. Whether joining an organization, attending a movie or simply meeting a friend for coffee, students can always find something that suits their needs at the Trone Student Center.

The focus of student activities at Furman is exciting and innovative programs that are planned and produced by students. Trone Student Center staff coordinates many of these campus programs and advises the Furman University Student Activities Board (FUSAB) as well as the new student orientation program.

FUSAB plans and produces a wide array of social, cultural and recreational programs each year, including concerts, comedians, movies, lectures, dances, special events and more. FUSAB also offers discount tickets to various concerts and events in the Greenville area. Students are selected each fall for membership in FUSAB.

Orientation is a comprehensive program designed to introduce incoming students to life at Furman. The new student website, www.furman.edu/newstudents, answers many pertinent questions about starting out at Furman, including details about summer orientation and many other pre-arrival tasks that students must accomplish before arriving on campus. A two-day summer orientation is an intense introduction to academics at Furman culminating with students entering initial course selections for the fall semester. The four-day fall orientation program, conducted immediately prior to the beginning of class, provides essential life skills, residential, and social information to all new students that will hopefully ensure a smooth transition from high school to Furman. For questions regarding Furman’s Orientation programs, please contact us by e-mail at orientation@furman.edu.

The Trone Student Center provides extensive recreational and extracurricular activities for students. In addition to meeting rooms and
student gathering spaces, the Trone Student Center is home to a large variety of student organizations, including SGA, FUSAB, Diversity Student Council, Heller Service Corps, student publications, and the campus radio station. The PalaDen Food Court, post office, the Barnes & Noble university bookstore, and an information center are also located in the Trone Student Center, as are the offices of the Vice President for Student Life, Dean of Students, Student Activities, Greek Life, Orientation, Volunteer Services, Career Services, Alcohol and Drug Education, Student Leadership Programs, Diversity and Inclusion, Study Away and International Education, Undergraduate Research and Internships, and the Cothran Center for Vocational Reflection.

**Heller Service Corps**

Nearly 65% of the Furman student body participates in volunteer service with the forty-five agencies of Heller Service Corps. Heller Service Corps is the umbrella organization that pairs students with opportunities for service outside of the Furman campus. Through opportunities designed to engage students and support the community, volunteers can serve in the areas of recreation, education, medical, animal interest, special needs, and community concerns. All students are encouraged to become involved with the service corps; transportation is available when necessary. For more information, visit [www.hellerservicecorps.org](http://www.hellerservicecorps.org) or stop by the Heller office in the Trone Student Center.

**The Shucker Center for Leadership Development**

The Shucker Center for Leadership Development is named in honor of former Vice President for Student Services, Dr. Harry B. Shucker. The Shucker Leadership Institute is the flagship program of the Shucker Center and has existed in some capacity since 1995. Focal points of the SLI program include collaboration, community connections, personal growth and development, skill building and servant leadership. Twenty-five incoming freshmen are selected in the fall of each year to become new fellows in the Shucker Leadership Institute. In the spring, the new fellows join approximately 45 other sophomore, junior and senior Shucker Fellows. All fellows have the opportunity to broaden their understanding of leadership concepts and are challenged to enact change through passion projects and social change initiatives. Other Shucker Center programs and offerings include the Furman Circle of Omicron Delta Kappa (ODK), Furman Student Leadership Awards, StrengthsQuest programs and Team Building services. For more information, visit: [www2.furman.edu/studentlife/leadership/](http://www2.furman.edu/studentlife/leadership/).

**Diversity and Inclusion**

The Office of Diversity and Inclusion seeks to create a living and learning environment for students, faculty, and staff that embraces difference and stimulates members of the community to work across differences. Staff collaborate with a variety of administrative units on campus to intentionally design a comprehensive, university-wide approach to diversity; facilitate equity, access, social justice and inclusion; and, empower students, faculty, and staff to build a diverse and inclusive campus community. Striving to improve the quality of life on campus by implementing comprehensive educational, cultural and service programs to promote multicultural awareness and respect for diversity, programs sponsored by the office include orientation activities, mentor programs, the Multicultural Seniors Banquet, various heritage month celebrations and programs and lectures highlighting diversity issues.

Furman has adopted a leadership for diversity training model from the National Coalition Building Institute (NCBI). The campus affiliate of NCBI provides programs and workshops to create understanding and works to eliminate barriers within our community. The team can also intervene when difficult conflicts arise, either between campus groups or between the campus and the surrounding community. In addition, SafeZone workshops are offered which aim to create a welcoming environment for lesbian, gay, bisexual, transgendered and queer or questioning (LGBTQ) students, faculty and staff.
The Assistant Dean advises the Student Diversity Council (SDC). The council is composed of student organizations which strive to affirm the diversity of the campus community in its many forms by embracing a broad definition of culture to include world views formed by race, ethnicity, gender, national origin, abilities, sexual orientation and religion. The student organizations promote and sustain diversity through mutual support, communication, and co-sponsorship of events among all student organizations.

**Student Media**

Student editors publish *The Paladin*, the weekly newspaper; *Echo*, the literary magazine; and *Bonhomie*, the yearbook. They also manage WPLS, an educational radio station and FTV-2, the campus television station. All publications are available at no cost to students.

**Athletics**

**Intercollegiate Athletics**

Furman’s intercollegiate athletic program currently consists of nine women’s sports: basketball, cross country, golf, soccer, softball, tennis, indoor and outdoor track and field, and volleyball and nine for men: baseball, basketball, cross country, football, golf, soccer, tennis and indoor and outdoor track and field. The university recently announced that Furman will begin competition in both men’s and women’s lacrosse during the 2014-2015 academic year bringing the total number of varsity sports in which the Paladins compete to twenty. All programs compete in Division I of the National Collegiate Athletic Association (NCAA). Furman is a member of the Southern Conference and the athletic program has a national reputation for both its academic and competitive excellence.

**Campus Recreation**

Intramural Sports, Club Sports, the Paladin Outdoor Program (POP) and Challenge Course programs are all organized by Campus Recreation staff.

Intramural Sports includes nine activities for men and women, including but not limited to, soccer, basketball, softball, golf and tennis. Men and women participate together in softball and sand volleyball. The Club Sports program provides opportunities for students to compete against other universities in activities such as powerlifting, cycling, rugby, soccer, triathlon, ultimate frisbee and baseball.

**Herman Lay Physical Activities Center (PAC)**

Overseen by Campus Recreation staff, Furman has exceptional facilities for physical activities which include courts for handball, racquetball and paddleball; a swimming pool; a gym for basketball or volleyball; a dance studio; and a fitness center with a variety of exercise options. The fitness center is equipped with treadmills, stationary bicycles, rowing ergometers, free weights and a variety of other strength-training machines.

**Cultural Opportunities**

Through the combined facilities of the university and the Greenville community, students may attend lectures, plays, concerts, recitals, art exhibits and other cultural programs.

Exhibits of works by Furman art students and faculty and touring exhibits are displayed in the Thompson Gallery located in the Thomas Anderson Roe Art Building.

Three or four plays a year, ranging from classical to modern, from musical review to mystery thriller, are presented in the Furman Theatre.

The Furman music department sponsors more than 200 concerts which are open to the public each year in a number of on-campus venues including McAlister Auditorium, Daniel Recital
Hall, and the Daniel Memorial Chapel. This wide array of opportunities to experience high quality live music includes presentations by ensembles of all shapes and sizes, such as major choral and orchestral concerts, faculty recitals, chamber music programs, student recitals, and guest artist recitals. In addition, there is an active series of concerts in the community which include the Greenville Symphony Orchestra and the Greenville Chorale.

**Student Organizations**

**Honor Societies**

Furman’s chapter of Phi Beta Kappa, the oldest scholastic honorary in America, known as Gamma of South Carolina, accepts candidates for Bachelor of Arts, Bachelor of Science, and Bachelor of Music degrees who have completed at least 95 semester hours in liberal arts courses. Students are eligible for election on the basis of qualifications set by the chapter in accordance with the regulations of the national organization.

Phi Eta Sigma is a national scholastic honor society for college freshmen, founded in 1923. Its goal is to encourage high scholastic attainment among freshmen in institutions of higher learning.

Organized in 1916, Pi Kappa Lambda is the national honor society in music. The Furman chapter, Gamma Beta, was chartered in 1970. Seniors and juniors with a minimum residence of six terms at Furman who are outstanding in musicianship and scholarship qualify for membership.

Organized in 1904, the Quaternion Club is an undergraduate-alumni organization for men. Undergraduate membership, limited to four juniors and eight seniors, is based on character, scholarship, leadership, loyalty, and service to the institution.

Founded in 1938, Senior Order is an organization for senior women who have shown outstanding abilities in their college careers and have rendered service in the college community. Membership is limited to no more than 15 students.

Omicron Delta Kappa is composed of junior and senior men and women who have shown qualities of character, leadership, scholarship and service to the university and its constituents. Omicron Delta Kappa’s main concern is leadership and service. Furman’s chapter sponsors the Babb and Reid awards to the outstanding female and male members of each class.

Kappa Delta Pi is an international honor society that recognizes the outstanding achievement of those who make significant contributions to education. Open to undergraduate and graduate students enrolled in the teacher education program, membership is based on intellectual competence and scholarship; overall performance in the program of teacher education; leadership potential; and commitment to students and teaching. The Xi Epsilon chapter was installed in 1977.

Alpha Sigma Lambda is the national honorary society in Continuing Education, recognizing students who achieve academic excellence while facing the competing interests of home and careers. Furman’s chapter, Gamma Theta, was chartered in 1982.

Lambda Pi Eta is the national honor society in Communication Studies. Organized around and devoted to the Aristotelian virtues of Logos (reasoned discourse), Pathos (passionate concern), and Ethos (character and ethical discourse), Lambda Pi Eta is comprised of students who have demonstrated outstanding academic achievement in Communication Studies and liberal education. The Nu Theta chapter was installed at Furman in 2001 and invites membership on the basis of qualifications set in accordance with the regulations of the national organization.

Among other national honor societies are Alpha Epsilon Delta, pre-health; Alpha Kappa Delta, sociology; Beta Beta Beta, biology; Eta Sigma Phi, classics; Omicron Delta Epsilon, economics; Phi Alpha Theta, history; Phi Sigma Iota, foreign language; Phi Sigma Tau, philosophy; Pi Gamma Mu, social science; Pi Kappa Lambda, music; Pi Mu Epsilon, mathematics; Psi Chi, psychology;
Pi Sigma Alpha, political science; Sigma Delta Pi, Spanish; Sigma Pi Sigma, physics; and Sigma Tau Delta, English.

Departmental Clubs and Professional Fraternities
Membership in departmental clubs and professional fraternities is by invitation, based on student interest. Organizations at Furman include the American Chemical Society, student affiliate chapter; student chapter of the Association for Computing Machinery; the Bartram Society, earth and environmental sciences; Order of Furman Theatre; Le Salon Francais; Sigma Alpha Iota, national professional music fraternity; Phi Mu Alpha Sinfonia, national professional music fraternity; Philosophy Club; Society of Physics Students; The Cicero Society, the Debating Society, and the Murrow Society in Communications Studies; the Psychology Club; Spanish Club; and the Political Thought Club.

Greek Life
Furman has a total of 14 fraternities and sororities and two governing councils: the Furman Panhellenic Council (FPC) and the Interfraternity Council (IFC). Over 50% of Furman’s student body participates in fraternity and sorority life.

The six Panhellenic sororities chartered at Furman are Alpha Delta Pi, Chi Omega, Delta Delta Delta, Delta Gamma, Kappa Delta, and Kappa Kappa Gamma. The six fraternities that compose IFC are Beta Theta Pi, Kappa Alpha Order, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Chi, and Sigma Nu. Furman recognizes two NPHC organizations, Alpha Kappa Alpha and Kappa Alpha Psi.

Furman utilizes a deferred recruitment process, meaning that fraternity and sorority recruitment takes place at the start of the spring semester. In order to participate in recruitment, be eligible to receive a bid and/or join an organization, students must have earned 12 or more credits with a GPA of 2.25 or greater for fraternities and a GPA of 2.30 or greater for sororities. Some individual organizations may require a higher minimum GPA.

The Assistant Director for Student Organizations & Greek Life advises each of the governing councils, which act as umbrella organizations for the individual fraternities and sororities.

Religious Life
Furman encourages students to engage ethical issues and explore mature spirituality. The chaplain provides Christian ministry to the Furman community and nurtures campus religious life, offering pastoral care and prophetic witness. He encourages an ecumenical spirit that affirms the diversity of religious traditions represented on campus. Stressing a collegial approach, the chaplain views ministry as a cooperative effort of clergy, students, faculty and staff.

Church affiliation and participation are encouraged. An ecumenical service of worship, led by the university chaplain, faculty and students, is held each Sunday evening at 5:00 p.m. (unless otherwise noted) in the Charles Ezra Daniel Memorial Chapel.

Complementing the leadership of the university chaplains and the chaplaincy intern, campus ministers offer leadership to individual groups and are available for pastoral care and counseling. Campus religious organizations include: Baptist Collegiate Ministry, Canterbury (Episcopal), Catholic Campus Ministry, Cooperative Student Fellowship, Exploration of Vocation and Ministry, Fellowship of Christian Athletes, Gospel Ensemble, Habitat for Humanity, International Justice Mission, Jewish Student Association, Lutheran Student Association, Mere Christianity Forum, Muslim Student Association, Orthodox Christian Fellowship, Presbyterian Student Association, Reformed University Fellowship, Society for Free Inquiry, Wesley (United Methodist) and Young Life. These organizations provide opportunities for service, fellowship and seek to create an atmosphere conducive to spiritual growth. Religious Council, composed of representatives from each religious organization, the secretary of religious affairs for the Association of Furman Students, and the chaplains, promote mutual understanding and cooperation among the various groups.
**Student Services**

**Career Services**
Career Services strives to equip students with the knowledge and skills necessary to make plans and decisions related to career goals. The office is organized into two functional areas: Career Guidance and Employer and Graduate School Relations. Career guidance services include individual counseling, career assessments, occupational information and graduate school guides. Seminars and workshops on topics such as résumé writing, interviewing skills and job search strategies are offered regularly. Employer and Graduate School services are designed to match Furman students with organizations seeking to hire full-time, permanent employees or recruit them for admission to graduate or professional schools. Programs include on-campus interviews, Career Fair, Graduate School Fair, Shadow Program, mock interviews, and online career development tools among others. Services are available to students and alumni at no cost.

**Commuter Services**
All students permitted to live off campus are urged to participate fully in extracurricular activities. Ample parking is available and post office boxes can be obtained in the Trone Student Center. Commuters may purchase food at the PalaDen also in the Trone Student Center or in the Charles E. Daniel Dining Hall.

**Counseling Center**
The Counseling Center offers counseling and mental health services to help students cope with college life. Counselors are available to assist students with a variety of concerns ranging from relatively mild distress to more serious psychological disorders. Services provided by the Counseling Center staff include individual counseling, support groups to enhance coping skills, mental health consultation, and educational programs on topics related to mental health and personal development. All professional services are offered on a confidential basis by appointment.

**Dining Services**
All resident students are required to subscribe to a meal plan. See the Expenses section of this catalog for more information.

Missed meals may not be made up. Students who have an extraordinary situation that requires them to miss meals regularly during the term should consult with the food service director to discuss their options. Meal plans and identification cards are non-transferable. Students may not pass, loan or sell their meal plan or identification card to anyone. Transfer of a meal card may result in disciplinary action as set forth in The Helmsman, the student handbook.

The dining hall is open throughout the academic year except during university breaks.

**Disability Services**
In compliance with the Americans with Disabilities Act Amendments Act (ADAAA) of 2009 and Section 504 of the Rehabilitation Act of 1973, Furman is committed to providing students equal access to university programs and facilities regardless of disability. Information about university procedures related to accommodations under ADAAA may be obtained from the Disability Services Coordinator, as well as from the Disability Services web site at www.furman.edu/disability.

**Student Health Services**
The Earle Infirmary is the home of Student Health Services for Furman undergraduates. Open Monday-Friday from 8:00am until 8:00pm when residence halls are open, the infirmary is staffed by one full-time nurse practitioner, four full-time nurses, five part-time nurses, one full-time medical secretary and a team of part-time physicians.

Doctors’ clinic hours are Monday and Wednesday from 9:00am until 5:00pm and Tuesday, Thursday and Friday from 9:00am until Noon. The Nurse Practitioner is available on Mondays from 5:00pm until 8:00pm and Tuesday, Thursday and Fridays from 9:00am until 6:00pm. Referrals to specialists or hospitals are made by the university physicians.
If hospitalization is required, the attending physician will make the necessary arrangements. Families will be notified in case of serious illness or accident. Medical Insurance information is available in the Expenses section of this catalog.

When the residence halls are closed, medical needs are the responsibility of the individual student. A listing of options for afterhours care is available on the Health Services web site. After hours care includes the North Greenville hospital emergency room, five minutes from campus in Travelers Rest.

For emergencies, call the University Police at 864-294-2111.

**Housing and Residence Life**

Residence halls and apartments are more than just places to study and sleep; they are communities where students learn to live with people of different values, behaviors and beliefs.

The university offers a variety of housing accommodations for approximately 2,600 students. Campus housing is available for freshmen in Blackwell, Geer, Judson, McBee, McGlothlin, Poteat, Ramsay and Townes halls. Campus housing is available for sophomores, juniors, and seniors in Chiles, Gambrell, Haynsworth, Manly and Ramsay halls. Men and women are housed on alternating floors or wings. Four lakeside cottages are also available.

Other housing options typically available for juniors and seniors include North Village and the Vinings apartments. Although a few single rooms on campus are available, most students are housed in double and triple rooms. Rooms may be re-configured to accommodate three people comfortably and safely when necessary.

In traditional residence halls, students are not permitted to visit on hallways or in the rooms of students of the opposite sex except during visitation hours, which occur from 10 a.m. to 2 a.m. daily. In co-educational halls, visitation regulations are the same as in other residence halls, and the staffs in both buildings are specially trained to offer activities that encourage healthy interaction between women and men. Students residing in North Village, the Vinings, and other campus apartments follow a self-regulated visitation program.

Housing and Residence Life staff communicates with new students about roommates, room assignments and policies. Housing regulations and expectations covering care of property, maintenance, safety and social conduct are published in Furman’s student handbook, *The Helmsman*.

All students must plan to live in campus housing for their entire undergraduate career. Exceptions will be considered for students who are commuting from home, married, in their fifth year, or who need a documented and approved medical or disability accommodation. All students living off-campus must have approval from Housing and Residence Life.

**Veterans’ Affairs**

Eligible veterans and dependents may certify their standing at Furman University through Military Science.

**Student Rights and Regulations**

**Educational Records**

Furman University provides students’ access to their educational records in accordance with the Family Education Rights and Privacy Act. Students wishing to inspect their records may do so by going to the appropriate office and presenting their identification cards. Furman complies with all federal and state statutes regarding the confidentiality of student records. Students are afforded opportunities to challenge the accuracy of files or records. Requests for hearings should be made through Student Life.

**Student Identification Cards**

When students first arrive on campus, they will receive a non-transferable identification card which will be used throughout their enrollment. The card entitles students to all university services and programs. A fee is charged to replace lost identification cards.
Student Conduct
An institution, like an individual, has a character developed out of its accumulated experience and expressed in its purpose, goals and values. Furman’s character is reflected in part in the policies and regulations which govern its students. Elements which have helped shape those regulations include the size of the university, its co-educational status, the diversity of its student body, the liberal arts tradition, and our commitment to academic excellence.

Students who enroll at Furman must understand that they are part of a residential living and learning environment where they should respect the rights of all members of the university community. Furman expects that students will act in a manner that is respectful of the rights and privileges of others. The university has a responsibility to provide an environment which is conducive to the freedom to learn on the part of its students. In order to provide such conditions, Furman has developed policies and procedures designed to safeguard this freedom.

Responsibility for maintaining the integrity of the community rests with each individual member. Only if every member assumes responsibility for personal and group integrity and civility will the community best meet the developmental needs of its members. Each person must examine, evaluate and regulate his or her own behavior to be consistent with the expectations of the Furman community. The university maintains in its Student Conduct Code policies against the possession or consumption of alcoholic beverages in the campus living and learning environment and the possession or use of illegal drugs. Furman students are required to be honest in their academic work and to obey all university policies and regulations.

Furman is not a sanctuary where students may escape the responsibilities imposed by law upon all citizens. The university does not condone the violation or attempted violation of federal, state or local laws. Alleged violations may be referred to appropriate local, state or federal law enforcement and the appropriate university official or through the student conduct process.

Regulations governing student conduct at Furman are ultimately the responsibility of the Vice President for Student Life. Students are expected to follow the rules set forth in this catalog and in Furman’s student handbook, The Helmsman. Violators of university regulations are subject to penalties which range from a reprimand to suspension or expulsion.

Furman’s student conduct system is educational, but does not condone inappropriate or illegal behavior. Irresponsible behavior will not be tolerated and will be addressed so that students understand the reasons for our policies and how their actions may adversely affect themselves and others.

Since Furman is a private institution, it reserves the right to refuse re-enrollment to a student whose personal or academic adjustment has been unsatisfactory. Acceptance for one term does not necessarily imply acceptance for succeeding terms. The university reserves the right to amend its rules, policies and procedures at any time.
Admission

Furman welcomes applications from students who seek to enroll as freshmen after graduating from high school or who transfer from regionally accredited colleges and universities. The Admission Committee also accepts applications for special admission, including non-degree and transient students.

Admission is selective, based primarily on previous academic performance and proven leadership and committed involvement in activities outside of the classroom. Neither academic record nor ability is in itself sufficient qualification for admission of any candidate. The university reserves the right to deny admission to any student who in the judgment of the Admission Committee may not benefit from Furman’s educational program or whose presence or conduct may be detrimental to the program.

Freshman Admission

Freshman applications are available through the Admission website at www.furman.edu/admission. Furman requires the use of the Common Application. Typically, candidates for admission must have graduated from a regionally accredited high school prior to enrollment at Furman. The Admission Committee uses the following criteria in its decisions:

High school record
An official transcript is required. A strong college preparatory course of study is essential. At minimum, it must include four years of English, Algebra I and II, geometry, three years of social studies, at least three years of natural sciences, and two years of the same foreign language. Typically, successful candidates complete four or more advanced or honors-level academic credits each year. Quality of courses and grades are the two most important factors in admission.

Essay
One essay is required of all students. Specific topics and word limits are listed on the admission application and website.

Extracurricular activities
All prospective students should provide information about their activities outside of the classroom, emphasizing their leadership, service, commitment to the community and civic engagement. The Admission Committee seeks students who demonstrate passion and commitment to these activities.

Optional standardized test scores
The Admission Committee believes that a student’s potential for success cannot be determined solely by standardized test scores. Rather, the Committee is interested in getting to know the whole student—one who pursues leadership and passionate engagement with the world. Therefore, submitting official test scores is optional. If the student does decide to submit test scores and submits multiple test results, the Admission Committee will select the scores that offer the student the greatest advantage in the admission review process.

Optional Furman Admission Network (FAN) interview
Applicants may elect to participate in an informal FAN interview with a Furman alumnus or parent volunteer. The applicant is matched with an interviewer in the student’s area whenever possible, and the interview takes place preferably in person. Other formats include phone or Skype interviews. Though a FAN interview is an optional part of the application process, the Admission Committee strongly urges every applicant to participate, as the interview allows the Committee to learn details about the student that may not be expressed in the formal application.

Early Decision Plan for Admission
Candidates who are confident that they will attend Furman if admitted should apply Early Decision. Furman’s Early Decision plan is binding, meaning that applicants must agree to withdraw all other
ADMISSION

applications and commit to enrolling at Furman if offered admission. Deadline to submit the application is November 1, and admission decisions are announced December 1. Admitted students learn of any financial aid award around December 15. If the student applies for the Lay, Duke, Hollingsworth, Townes, or departmental scholarships, he or she will receive notification in early April. Therefore, if the student’s college decision is dependent upon financial assistance from these scholarships, applying Early Decision is not recommended.

To reserve a class space for the fall, admitted students must submit a $500 non-refundable enrollment deposit and a signed statement of intent no later than January 5. These candidates are required to immediately withdraw applications submitted to all other institutions at this time. Early Decision candidates whose applications are deferred receive consideration in the Regular Decision Plan. The candidate is required to have the high school submit an updated transcript of grades for the first semester of the senior year.

Early Action Plan for Admission

First-year candidates who wish to know of their admission decisions earlier than Regular Decision may elect to apply Early Action, which is non-binding. Deadline to submit the application is November 15, and admission decisions are announced February 1. Admitted students learn of any financial aid around March 1. If the student applies for the Lay, Duke, Hollingsworth, Townes, or departmental scholarships, he or she will receive notification in early April.

To reserve a class space for the fall, admitted students must submit a $500 non-refundable enrollment deposit and a signed statement of intent no later than May 1.

Regular Decision Plan for Admission

Students applying Regular Decision must submit their applications no later than January 15. Admission decisions are announced April 1. Admitted students learn of any financial aid award in early April. If the student applies for the Lay, Duke, Hollingsworth, Townes, or departmental scholarships, he or she will receive notification in early April.

To reserve a class space for the fall, admitted students must submit a $500 non-refundable enrollment deposit and a signed statement of intent no later than May 1.

Special Freshman Admission

Students admitted to Furman as freshmen typically enroll after graduating from a regionally accredited high school following four years of study. Occasionally, admission is offered to qualified candidates whose educational backgrounds are different from those of most students. These candidates include: early admission candidates (who wish to enroll after three years of high school without graduating), early high school graduates (who have fewer than four years of high school or are younger than most freshmen), and home-schooled students. Candidates under any of these special categories are judged on an individual basis by the Admission Committee.

Early admission candidates or early high school graduates should be students of unusual academic promise and personal maturity. Candidates must have a minimum un-weighted high school grade point average of a 3.50. An interview with a member of the Admission staff is also required. Home-schooled students should submit all the materials described in the Freshman Admission section, as well as an outline of topics or curriculum covered in the secondary school experience. The student is required to interview with the Admission home-school coordinator.

Advanced Placement and International Baccalaureate Exams

Students may receive credit for Advanced Placement (AP) courses by submitting scores from the accompanying exams directly to Furman. Typically, credit for one course at Furman is
awarded for each exam in which a student scores four or higher (three or higher for Mathematics BC). For International Baccalaureate (IB) courses, credit for one course at Furman is typically awarded for each examination with a score of six or higher. Consult the Academic Records website at www.furman.edu/registrar for more specific information about AP and IB exam equivalencies.

Transfer Students

Students may transfer to Furman from other regionally accredited colleges. The Admission Committee uses the following criteria in its decisions:

College courses and grades earned
This is the most important factor for transfer applicants. An official transcript must be received by the application deadline.

College official’s report
A college official’s report, found on the Common Application website, must be received by the application deadline.

High school record
Transfer candidates are required to submit an official high school record. Courses and grades from high school are considered for transfers with less than one year of college at the time of application.

Transfer applications are considered for both semesters. Application review for fall semester begins January 15. First offers of admission are delivered April 1. Applications for fall semester are considered until all available spaces are filled. (All spaces are typically filled by mid-spring.) Accepted students who wish to enroll must submit a non-refundable enrollment deposit of $500 by May 1 or by the deadline in their acceptance letters if later.

Transfer students may apply for spring semester by completing the application for admission by November 1, and they will be notified of a decision no later than December 1. Accepted students who wish to enroll must submit a non-refundable enrollment deposit of $500 by Jan. 5 or by the deadline in their acceptance letters if later.

After approval for admission, Academic Records will correspond with the student concerning courses for which credit will be transferred, minimum number of credits required for graduation, and general education requirements that remain to be completed. The department chair in which the student plans to major determines the specific courses required in the major program.

Credit for courses successfully completed at other regionally accredited colleges or universities transfer to Furman provided a satisfactory grade (C- or better in a traditionally graded course) was earned and the courses are equivalent to courses offered at Furman or would otherwise fit into the liberal arts curriculum at the university.

International Students

The Admission Committee considers the following criteria in its decisions:

Secondary school record
All applicants must send official transcripts.

Standardized test scores
Scores from TOEFL or IELTS should be sent to Furman by the testing agency.

Personal Statement
A writing sample of 300 to 500 words is required.

Certificate of Finance
Limited financial assistance is available for international students. All applicants must submit the Certificate of Finance, which demonstrates the amount of funding a student is able to provide toward his or her educational expenses. This form is necessary to process the I-20 form for the F-1 student visa.
Proof of Health Insurance
All visa holders and any accompanying dependents must maintain active health insurance coverage that meets or exceeds U.S. federal regulations. The Office of Study Away and International Education will purchase appropriate insurance for all international students. Students will be invoiced directly by the university for the associated premiums unless they have presented prior documentation of other adequate coverage.

In addition to the documents above, all international transfer students should submit an official college transcript and Dean’s Statement.

Deadlines for international students are the same as for other new students, freshmen and transfers.

Non-Degree Students
A non-degree student has already earned a bachelor’s degree from a regionally accredited institution and is not seeking a degree from Furman. Each applicant for admission is required to submit a non-degree seeking application and a transcript detailing all previous post-secondary educational experiences, including date of graduation. Admission is based on the quality of college work and available space. Non-degree students must re-apply for each term in which they wish to enroll. Financial aid is not available to non-degree students.

Transient Students
A transient student is seeking a degree at another accredited institution and seeks to earn credit at Furman. Each applicant for admission is required to submit a non-degree seeking application, a transcript detailing all previous post-secondary educational experiences, and a statement from the other institution reflecting that the student is in good standing. Admission is based on the quality of college work and available space. Financial aid is not available to transient students.

Re-admission
Following an absence from Furman of one or more regular terms, a student who desires to re-enter must apply for re-admission. The Associate Academic Dean reviews the application. If approved, the student must meet the requirements for graduation and the minimum academic standards effective at the time of re-admission.

Expenses

Application Fee
A non-refundable application fee of $50 must accompany the student’s application for admission.

Enrollment Deposit
To reserve a place in the university, all new students who plan to enroll at Furman must submit a non-refundable enrollment deposit of $500. This payment is not covered by scholarship or financial aid. It will be held until the student graduates or leaves at the end of an academic year.

Entering freshmen must submit the enrollment deposit by January 15 if they are in the Early Decision Program or by May 1 if they are in the Regular Decision Program. Transfer students must submit the deposit by May 1 or by the deadline in their acceptance letter, whichever is later. The enrollment deposit establishes eligibility for new students to receive registration materials.
Basic Fees

<table>
<thead>
<tr>
<th></th>
<th>16 Week Semester</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive Fee</td>
<td>$21,392.00</td>
<td>$42,784.00</td>
</tr>
</tbody>
</table>

Room:

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>16 Week Semester</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence hall double occupancy</td>
<td>2,909.00</td>
<td>5,818.00</td>
</tr>
<tr>
<td>Residence hall designed single</td>
<td>3,246.00</td>
<td>6,492.00</td>
</tr>
<tr>
<td>North Village 2 bedroom apartment</td>
<td>3,296.00</td>
<td>6,592.00</td>
</tr>
<tr>
<td>North Village 4 bedroom apartment</td>
<td>3,530.00</td>
<td>7,060.00</td>
</tr>
</tbody>
</table>

Meal Plan:  | Food Points/semester | Guest Meals / semester | 16 Week Semester | Annually       |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlimited</td>
<td>300</td>
<td>5</td>
<td>2,513.00</td>
<td>5,026.00</td>
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<tr>
<td>190 Block Plan</td>
<td>350</td>
<td>15</td>
<td>2,168.00</td>
<td>4,336.00</td>
</tr>
<tr>
<td>160 Block Plan</td>
<td>400</td>
<td>15</td>
<td>1,974.00</td>
<td>3,948.00</td>
</tr>
<tr>
<td>90 Block Plan</td>
<td>425</td>
<td>10</td>
<td>1,343.00</td>
<td>2,686.00</td>
</tr>
<tr>
<td>75 Block Plan</td>
<td>450</td>
<td>5</td>
<td>1,192.00</td>
<td>2,384.00</td>
</tr>
</tbody>
</table>

Special Fees

- Late Enrollment: 100.00
- Student Government Association: 190.00 380.00

A study away fee will be assessed to all students participating in faculty-led travel study programs or exchange programs. An administrative fee is assessed to all students participating in affiliate programs. Consult the Study Away and International Education web site at www.furman.edu/international for more information.

For 2014, pending approval by the Board of Trustees, summer session undergraduate tuition will be $920 per credit.
Room and Board Fees

All students, except those married or living at home with a parent or guardian, must live in university housing throughout their entire undergraduate career at Furman.

The basic double room rate is $5,818. Other housing options, such as single rooms and apartment style living, cost more depending on a student’s specific housing assignment. Students are responsible for paying the rate that coincides with a specific housing assignment, regardless of the origin of the assignment.

All resident students are required to subscribe to a meal plan. Furman offers five different meal plans. First year students are required to subscribe to the unlimited plan which provides unlimited access to the dining hall and 300 food points. Students entering their second year must subscribe to at least the 160 meals per semester plan, while students in their third year are required to choose at least the 90 meals per semester plan and fourth year at least the 75 meal plan. Vinings residents are also required to purchase a meal plan. Commuting students may purchase a meal plan, but are not required to do so.

Food points are also offered and may be used on a $1 per point basis to purchase any item sold in the dining hall, PalaDen Food Court, Einstein Bagels or Sidelines. Food Points, which are stored on the student ID card, expire at the end of the academic year and are not refundable for cash.

Campus Cash accounts may be established as well. These accounts work like a declining balance debit card—add funds to your account and the balance is reduced by the amount of each purchase. Money added to a Campus Cash account can be used for on-campus purchases in all Dining Services locations and the Furman Bookstore.

General Fee Policy

The university reserves the right to change tuition and other charges at the beginning of any term if such a change is judged necessary by the Board of Trustees. In recent years, Furman has seen a rapid increase in expenses. While every effort is made to keep operating costs low, it is probable that fees for academic years subsequent to this year will be increased as costs rise.

Payment of Fees

Fees must be paid in full to begin enrollment. For all students, fees are payable prior to the start of each term for all students:

<table>
<thead>
<tr>
<th></th>
<th>Resident Students</th>
<th>Commuting Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>By August 15, 2013</td>
<td>$27,094.00</td>
<td>$21,672.00</td>
</tr>
<tr>
<td>By December 18, 2012</td>
<td>27,094.00</td>
<td>21,582.00</td>
</tr>
<tr>
<td>Total</td>
<td>54,098.00</td>
<td>43,254.00</td>
</tr>
</tbody>
</table>

Statements will be delivered via e-mail in July and November.

Tuition Payment Plan

Furman University recognizes that managing the cost of education is a challenge for some families. Through our program with Educational Computer Systems, Inc. (ECSI), we are pleased to offer you affordable and convenient payment options for meeting the costs of the academic year.

The Tuition Payment Plan (TPP) helps you to stretch out your tuition payments instead of making a lump sum payment each semester. The annual plan provides for ten monthly payments and semester plans are available for three, four, or five payments per semester.

This is an interest-free payment plan. The only cost to you is the non-refundable application fee, $75 for an annual plan and $50 for a semester plan.
You can apply for a new TTP at www.ecsi.net. Click on Students select Apply for a monthly tuition payment plan then select Furman University. If you had a TPP last year, start by entering your current ECSI account number. You can also contact ECSI by phone at 1-866-927-1438.

TPP is not available for students participating in study away programs. However, students participating in a study away program during only one semester may use the TPP for the other semester in the academic year.

Students who register for any term after established deadlines may be assessed a $100 late registration fee.

**Comprehensive Fee Policy**

Furman assesses a comprehensive tuition fee for students seeking a bachelor’s degree through the undergraduate day program enrolled for up to 20 credits in the fall or spring semesters. Requests for exceptions may be made by students who are financially independent as determined by the Free Application for Federal Student Aid (FAFSA), who have documented medical, or learning difficulties, or who are considered fifth year seniors for billing purposes.

Students are considered fifth year seniors for billing purposes if one of the following conditions is met. Credit awarded through exam equivalencies, such as Advanced Placement (AP) or International Baccalaureate (IB), do not contribute to the credit requirement in this situation.

- A student has attended Furman University for eight or more semesters,
- A student has attended Furman University for at least six semesters and has earned at least 27 credits prior to their enrollment at Furman as a degree-seeking student, excluding credits awarded based on exam equivalencies, or
- A student has attended Furman University for at least four semesters and has earned at least 57 credits prior to their enrollment at Furman as a degree-seeking student, excluding credits awarded based on exam equivalencies.

Students may request an exception to be charged on a per course basis by completing an application through the Associate Academic Dean. The request must be submitted to the Associate Dean no later than the last day of the course adjustment period for the term in question.

Students permitted to register for an overload while on study away will be assessed tuition for any credits beyond the standard course load expected for the specific study away experience consistent with the per-credit charge in effect for the term in question.

**May Experience Fees**

Students charged the comprehensive tuition fee in either the fall or spring semester may enroll for the May Experience tuition-free. The tuition discount applies to faculty-led study away programs as well, but travel costs are the responsibility of the student and vary depending on program location. Need-based scholarships are typically available to address these travel costs for May Experience study away programs, consult with the Office of Study Away and International Education for more information.

Students charged on a per credit basis during the academic year or not enrolled at any time during the academic year on a degree-seeking basis will be charged on a per credit basis for May Experience.

Students failing to register for May Experience by the established deadline available on the Academic Records web site are subject to a $100 late registration fee.
Students choosing to live in university-affiliated housing during the May Experience will pay a discounted all-inclusive room and board rate determined each year prior to May Experience registration.

Refund Policy

The university is committed to expense based upon the enrollment anticipated at the beginning of each term. Enrollment at Furman is considered a contract binding students and their parents for charges for the entire term. Refunds are granted in certain cases, as follows:

Withdrawal from the University
Students who withdraw from the university may receive a partial refund in accordance with the tuition schedule below. The date of withdrawal is established by the Associate Academic Dean.

Furman offers tuition insurance through A.W.G. Dewar, Inc. to extend the refund policy for students who must withdraw from the university for medical reasons. In cases of withdrawals due to accident, illness, or mental health, the plan provides a 80 percent refund throughout the term. Please refer to Dewar for specific information.

Course Withdrawal
Because tuition is normally assessed on a comprehensive basis, no refunds are issued when a student withdraws from one or more courses while remaining enrolled at the university. A student who has been granted an exception from the comprehensive fee structure in a given term will receive a prorated refund for withdrawal from a course.

The following schedule describes the time frames and amounts of pro-ration for tuition refunds:

<table>
<thead>
<tr>
<th>Tuition</th>
<th>fall or spring semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the first 7 class days</td>
<td>90%</td>
</tr>
<tr>
<td>Between the 8th and 12th class days</td>
<td>75%</td>
</tr>
<tr>
<td>Between the 13th and 17th class days</td>
<td>50%</td>
</tr>
<tr>
<td>Between the 18th and 22nd class days</td>
<td>25%</td>
</tr>
<tr>
<td>After the 22nd class day</td>
<td>none</td>
</tr>
</tbody>
</table>

Meal Plan
50% of the unused portion at any time during a term if withdrawing from the university.

Room
No refund if enrollment has been completed.

Student Government Association Fee
No refund if enrollment has been completed.

Enrollment Deposit
Not refundable to students who decide not to enroll or who withdraw for any reason during the academic year.

Financial Aid
Furman will return the unearned portion of federal (Title IV) student aid for any students receiving this aid who withdraw from the University, do not return from an approved leave of absence or extend an approved leave of absence beyond 180 calendar days. Title IV funds that may have to be returned include the Pell Grant, Federal Direct Loans, Parent Loans for Undergraduate Students (PLUS), Perkins Loans, Supplemental Educational Opportunity Grant (SEOG) and the Leveraging Educational Assistance Partnership (funds part of the South Carolina Tuition Grant).

The unearned portion of federal Title IV funds is determined by dividing the number of days in the term that have passed as of the date of withdrawal (defined below) by the total number of days in the term. If the withdrawal occurs after 60% of the term has elapsed, no return of Title IV funds
is required. The Office of Financial Aid calculates the return of Title IV funds using a federally-prescribed formula.

Funds will be returned in the following order: Federal Direct Unsubsidized Loans, Federal Direct Subsidized Loans, Federal Perkins Loans, and Federal PLUS Loans. If funds remain after repaying all loan amounts, the remaining funds are repaid to the Federal Pell Grant and the Supplemental Educational Opportunity Grant programs.

Students and their families should be aware that the requirement to return federal Title IV assistance might result in a balance due to the university; the student and/or his or her family is responsible for paying any balance resulting from the return of Title IV aid.

For non-federal funds, the institutional refund policy is applied to all other aid received by the student unless the Office of Financial Aid is instructed to do otherwise by the donor or sponsor of the award.

A student’s withdrawal date is defined as the actual date the student began the withdrawal process, the student’s last date of recorded attendance or the mid-term date for a student who leaves without notifying the university.

Students withdrawing at any time during a term due to required active military service will receive a refund in accordance with stated policy. Any student in this situation who re-enrolls within the following five years will receive a credit against the expense of the first term in an amount equal to fees for the last term enrolled, less the amount of any refund paid at the time of entry into military service.

All questions about refunds or other financial matters should be directed to the Student Business Center.

Personal Expenses

Books and Supplies
Students should have money to purchase books and supplies. First year students should allow $1,100 per year. Students are permitted to charge required books and supplies to their student accounts, regardless of financial aid status. While this option to charge books and supplies to the student account is not a requirement, it can help provide flexibility for students with financial need to purchase these items prior to the start of classes.

Membership Fees
Students have various organizations that operate on small budgets of their own. Membership in the departmental, honorary and social clubs, which is voluntary, frequently involve nominal fees.

Group Medical Insurance
Furman does not provide medical insurance for its students. Please check with your family insurance provider to ensure that the student will be adequately covered throughout the enrollment period. Many family insurance policies may provide for emergency coverage while a student is away from home, but do not cover non-emergency situations. If you have a PPO or HMO, health care providers in Greenville may be considered out of network or out of the service area.

If a student desires to purchase a medical insurance policy, you may do so through United Healthcare. You can enroll in and pay for the policy through their website at www.uhcsr.com/acsa. Click on “Find My School’s Plan” and follow the online instructions. If you have questions, please contact ACSA Customer Service by telephone at 1-888-526-2272.

Miscellaneous Expenses
Most recreational facilities are for use without charge. A small fee is assessed to students for use of the golf course and indoor tennis courts.

Residence Hall Furnishings
Traditional residence hall rooms are furnished with beds, desks, dressers, chairs, and a
microfridge unit. Students supply pillows, bed linens, blankets, bedspreads, towels, laundry bags, study lamps and similar items.

Laundry
The cost to use this service is included in the housing charge.

Residence Hall Fines and Special Fees
Students are expected to preserve good order in buildings on campus and to pay damages, if necessary, as determined by Housing and Residence Life. A financial penalty will be assessed for moving from an assigned residence to another without permission.

Financial Aid

Furman University administers over $70 million in federal, state, and institutional financial aid, over $47 million of which is funded directly by Furman. The financial aid program includes a broad range of academic and special talent scholarships as well as a comprehensive need-based program of grants, loans and work study opportunities.

Most aid awarded by the university is offered as a combination of scholarship and/or grant, loan and student employment (work study).

New students without a high school diploma or a recognized equivalent are not eligible for the receipt of Title IV funds. However, students without a diploma or equivalent enrolled at Furman prior to July 1, 2012 may continue to be considered eligible provided that they have successfully completed at least six credits applicable to the award of a degree at Furman.

Definitions

COA
Cost of Attendance includes tuition, fees, weighted average room cost, the maximum meal plan, estimated cost of books, estimated personal expenses, and estimated transportation costs. “Direct COA” includes only tuition, fees, the weighted average room cost, and the maximum meal plan. All undergraduates day students are assigned the same COA based on Furman’s four-year residency requirement.

EFC
Expected Family Contribution is the minimum amount a family is expected to contribute for the student’s education for a given academic year. The EFC is calculated by the FAFSA and the CSS PROFILE and assumes families will finance education utilizing current income, past savings, and student and/or family borrowing.

Demonstrated Need
The difference between the Cost of Attendance
(COA) and the Expected Family Contribution (EFC).

**FAFSA**
Free Application for Federal Student Aid used in awarding federal and state grants as well as loans and work study.

**CSS PROFILE**
A financial aid application that Furman uses to determine need for Furman Grant funding. The CSS PROFILE is a product of The College Board.

**Need Based Financial Aid**
Aid awards for which a student must demonstrate financial need in order to qualify. Such awards include the Federal Pell Grant, the Federal SEOG, the Federal Direct Subsidized Student Loans, the Federal Perkins Loan, the Federal Work Study program, the South Carolina Tuition Grant, and the Furman Grant.

**Financial Aid Package**
The offer of financial aid awards, including academic/merit scholarships, for which a student is eligible. The student is notified of his or her financial aid package via e-mail and/or through the MyFurman portal at furman.edu. Beginning with the 2013-2014 academic year, all information of this nature will be conveyed via electronic means; new students through the e-mail they provide during the admission process and returning students using the MyFurman site.

**Satisfactory Academic Progress for Federal Title IV Financial Aid**
Federal regulations mandate that institutions of higher education establish minimum standards of satisfactory academic progress (SAP) for students receiving Title IV (federal) financial aid. Satisfactory academic progress is comprised of three evaluative standards:

**Quality:** Students must achieve a cumulative grade point average (GPA) that is consistent with meeting graduation requirements.

<table>
<thead>
<tr>
<th>Cumulative credits attempted</th>
<th>Minimum cumulative grade point average</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 or less</td>
<td>1.58</td>
</tr>
<tr>
<td>29-50</td>
<td>1.70</td>
</tr>
<tr>
<td>51-82</td>
<td>1.90</td>
</tr>
<tr>
<td>83 or more</td>
<td>2.00</td>
</tr>
</tbody>
</table>

**Pace:** Students must demonstrate they are making progress towards the completion of the degree by earning a minimum number of credits each semester. The pace required is calculated by dividing the cumulative number of credits earned by the cumulative number of credits attempted. A student must have earned a minimum of 67% of all credits attempted after each academic year.

**Time Frame:** Students must complete their degree within a specified period.

Federal regulations specify that a student may receive federal financial aid for a maximum time frame of 150% of the published length of the program. At Furman, students must earn at least 128 credits to earn the bachelor’s degree. Accordingly, the maximum time frame for students to receive federal aid is 192 attempted credits. There is no appeal for exceeding the maximum time-to-degree standard.

For all measures of satisfactory academic progress, credits attempted include all work at Furman plus any credits earned elsewhere that contribute toward the degree such as AP, IB, and transfer credits. The qualifying grade point average remains the Furman GPA which excludes course grades from any other institution.

Students receiving federal aid are evaluated at the end of each academic year. Federal aid programs affected are Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work Study, Federal Perkins Loan, Federal Direct Loan, and Federal Direct Parent Loan for Undergraduate Students (PLUS).
Appeal Process
Students who are not meeting SAP standards at the end of the academic year are notified via their campus email account. They cannot be awarded federal financial aid for the fall semester. The email advises them to write a formal letter of appeal to be considered for a fall probationary semester.

Submitting an Appeal
A formal letter (email is acceptable) from the student explaining the mitigating circumstances involved and how the circumstances have or will be resolved must be submitted to the Office of Financial Aid. Mitigating circumstances are typically considered to be any situation beyond the control of the student.

Some examples of mitigating circumstances include student illness, family issues, emotional distress, interpersonal problems, difficulty adjusting to college life, balancing school, employment obligations, etc. A financial aid counselor may determine if other circumstances documented by the student may be considered.

Appeal Decision Process
In most cases, financial aid counselors have the responsibility for reviewing and deciding on individual appeals, but the Financial Aid Appeals Committee can meet to approve or suspend aid when necessary.

If the appeal is approved, the financial aid counselor will award aid for one semester only on a probationary basis. The student will be informed that financial aid will not be awarded for any future semesters unless an additional SAP appeal is submitted and approved.

When a subsequent appeal is submitted, the financial aid counselor can follow the same procedures. However, students who are not meeting SAP standards during multiple semesters are likely to be presented to the Financial Aid Appeals Committee for review.

If the Financial Aid Appeals Committee agrees that the student should be denied aid based on the most recent appeal, the student will be notified, and he or she will be made aware of alternative financing options (such as private loans that do not require school certification or payment plans). The student may decide to self-pay or apply for a leave of absence.

Students do not automatically regain eligibility for financial aid during a leave. An additional appeal must be submitted prior to returning to regular enrollment.

Financial Aid Application Procedures for Prospective Students

- Submit the CSS PROFILE at https://profileonline.collegeboard.com. Early Decision applicants should complete the CSS PROFILE by November 15, Early Action applicants by February 15, and Regular Decision applicants no later March 1. Furman’s CSS PROFILE code is 5222.
- Submit the FAFSA (www.fafsa.gov). Early Decision and Early Action applicants should submit the FAFSA by February 15, and Regular Decision applicants should submit the FAFSA by March 1. Furman’s Title IV code for FAFSA results is 003434. Early decision applicants who received a financial aid award package based solely on the CSS PROFILE must complete the FAFSA in February to confirm the federal and/or state portions of their Early Decision financial aid package.
- Notification of financial aid packages for admitted Early Decision applicants will occur in mid-December, while admitted Early Action applicants will receive their financial aid packages in early March, and Regular Decision applicants will be notified in early April.
Financial Aid Application Procedures for Returning Students

Returning students (enrolled in a previous term at Furman) who wish to continue eligibility for need-based financial aid (see definition of need-based financial aid in the preceding paragraphs) must complete the FAFSA each year. Furman encourages returning students to complete the renewal FAFSA by May 15.

The U.S. Department of Education will send renewal FAFSA notices to students by January of each year, typically via e-mail. Returning students who are re-applying for financial aid do not need to complete the CSS PROFILE unless the student is asking for re-evaluation of aid eligibility based on special financial circumstances; otherwise, the CSS PROFILE is required of first-time financial aid applicants only.

Outside scholarships from sources such as corporations, clubs, civic organizations and churches are applied to the semester in which the funds are received, unless the donor specifies otherwise. This may result in a credit balance for any semester in which the outside scholarship checks are received. Students requesting a refund of the credit balance in any semester may have a balance due on their account for a future semester.

Study Away

Financial aid applies as it would during a semester on campus to all Furman-sponsored faculty-led travel study programs. Students participating in approved affiliate programs may receive federal and state aid for which they qualify, but no Furman financial aid can apply to these programs. No financial aid of any type will be administered by Furman for students pursuing study opportunities while on a leave of absence from the University. Contact the Office for Study Away & International Education for more details.

Merit-Based Scholarships

Furman offers a number of scholarships to students who demonstrate strong ability based on their academic achievements, or who are gifted in other areas. Each year we offer more than 100 renewable merit scholarships to first year students.

Unless otherwise specified, these all have separate applications that are due January 15. Notification of all scholarship winners is April 1.

Herman W. Lay Scholarships
Awarded to four incoming students each year who have displayed exceptional academic achievement and distinctive personal accomplishment. Provides full tuition, weighted average room costs, maximum meal plan and student fees worth more than $200,000 over four years. A 3.00 cumulative GPA is required for annual renewal.

James B. Duke Scholarships
Awarded to 10 incoming students each year who have displayed exceptional academic achievement and distinctive personal accomplishment. Provides full tuition worth more than $160,000 over four years. A 3.00 cumulative GPA is required for annual renewal.

John D. Hollingsworth Scholarships
Awarded to incoming students from South Carolina who have demonstrated outstanding achievement and a strong commitment to their communities. Includes a renewable $25,000 scholarship, a study away stipend of $2,000, an additional $3,000 stipend for a summer internship or research experience, and participation in the Public Leadership Seminars, which connect students with government and civic leaders. A 2.70 cumulative GPA is required for annual renewal.

Charles H. Townes Scholarships
Awarded to incoming students outside of South Carolina who have demonstrated outstanding achievement and a strong commitment to their communities. Includes a renewable $25,000
scholarship, a study away stipend of $2,000, an additional $3,000 stipend for a summer internship or research experience, and participation in the Public Leadership Seminars, which connect students with government and civic leaders. A 2.70 cumulative GPA is required for annual renewal.

**Alden Pre-Engineering Scholarships**
Renewable, full-tuition scholarships awarded to first year students majoring in the three-year pre-engineering program. A 3.00 cumulative GPA and a recommendation from the physics department are required for annual renewal.

**Alden Transfer Scholarship**
The Alden Transfer Scholarship is a full tuition, two-year scholarship for transfer students. A 3.00 cumulative GPA is required for annual renewal.

**Art Scholarships**
Competitive scholarships awarded on the basis of portfolio submissions. Prospective students must submit portfolios to the chair of the art department. A 3.00 in art courses is required for annual renewal.

**Chemistry Scholarships**
Renewable scholarships of up to $2,000 for students planning a career in the chemical industry or planning to pursue a Ph.D. in chemistry. A 3.00 cumulative GPA and a recommendation from the chemistry department are required for annual renewal.

**Exploration of Vocational Ministry Scholarships**
Available to students exploring a career in full-time faith-based ministry. For details, contact the University Chaplain’s office.

**Furman Teacher Education Scholarships**
Renewable scholarships awarded to entering first year students who indicate teaching as their career goals. A 3.00 cumulative GPA and a recommendation from the education department are required for annual renewal.

**Liberty Scholarships**
Renewable $8,000 scholarships awarded to first year students with an intended business administration, economics or computer science major. A 3.00 cumulative GPA is required for annual renewal.

**Merit-based Legacy Scholarships**
Five competitive, renewable $25,000 scholarships available to incoming students who have indicated on the application supplement that a parent or grandparent attended Furman University. To be eligible for this scholarship, the applicant must complete a FAN interview, as well as the Merit-based Legacy Scholarship application.

**Mock Trial Scholarships**
Renewable scholarships awarded to entering freshmen with a passion for and commitment to the Mock Trial activity and a desire to participate in Furman’s Mock Trial program. A 3.00 cumulative GPA and continued participation in the Mock Trial program are required for annual renewal.

**Music Scholarships**
Competitive scholarships awarded on the basis of auditions held between December and February. For more information, contact the Music Department.

**Poverty Studies Scholarship**
Renewable scholarships awarded to entering first year students with a commitment to poverty studies and a desire to complete the Poverty Studies interdisciplinary minor. A 3.00 cumulative GPA and regular progress through the Poverty Studies interdisciplinary minor are required for annual renewal.

**Reserve Officers’ Training Corps (ROTC) Scholarships**
Army ROTC scholarships are available to selected students for three or four years. Recipients, selected jointly by Furman and the U.S. Army, complete military science courses each term. Upon graduation they receive a commission in the U.S. Army, Army Reserve or National Guard.
For three-year ROTC scholarship recipients, Furman provides scholarship or grant assistance in the amount of the weighted average room cost and the maximum meal plan costs for the student’s first year; the student is responsible for all other costs, including the comprehensive tuition fee.

For four-year ROTC scholarship recipients, the Army provides full tuition and fee support as well as a monthly stipend, while Furman provides scholarship or grant assistance in the amount of the weighted average room cost and the maximum meal plan costs.

**Sustainability Science Scholarships**
Renewable scholarships awarded to entering first year students with a commitment to sustainability and a desire to major in Sustainability Science. A 3.00 cumulative GPA is required for annual renewal.

**Theatre Arts Scholarships**
Renewable scholarships awarded to entering first year students with a commitment to theatre arts and a desire to major in Theatre Arts. A 3.00 GPA in the Theatre Arts major and a 2.00 cumulative GPA are required for annual renewal.

**Wylie Mathematics Scholarships**
Renewable scholarships awarded to entering first year students with outstanding mathematical ability and a combined SAT score of at least 1350. A 3.00 cumulative GPA and a 3.25 GPA in courses that would contribute to the major is required for renewal after the first year. A 3.60 GPA in courses that contribute to the major is required for annual renewal in the second, third and fourth year.

**South Carolina Merit-Based Scholarships**
These state merit-based scholarships are awarded without regard to financial need.

Hope Scholarships are $2,800 awards for South Carolina residents who graduate from high school with at least a 3.000 grade point average and who do not qualify for a South Carolina LIFE or Palmetto Fellows award. The Hope award is for the first year only; recipients who earn at least 30 credits with a 3.000 grade point average are eligible for a LIFE scholarship the following year. Recipients must be enrolled in at least twelve credits each semester.

LIFE scholarships are $5,000 awards for South Carolina residents attending a four year private college or university in the state. To qualify, students must meet two of the following criteria: a 3.000 grade point average on the final high school transcript; rank in the top 30 percent of their graduating class; or earn a combined SAT score of at least 1100 or an ACT score of at least 24. The awards are renewable provided the student maintains a 3.000 grade point average and completes at least 30 credits each year consistent with provisions enacted through South Carolina law. Recipients must be enrolled in at least twelve credits each semester.

Palmetto Fellows awards are $6,700 academic grants to students from South Carolina based on annual guidelines established by the state legislature: currently a 3.500 grade point average in high school, 1200 combined SAT score, and a rank in the top 6 percent of the high school class or at least a 1400 combined SAT score and a high school grade point average of 4.00 or greater. Eligible candidates may apply through their high school guidance office in the fall of their senior year. The awards are renewable provided the student maintains a 3.000 grade point average and completes at least 30 credits each year. Recipients must be enrolled in at least twelve credits each semester.

Students must be South Carolina residents, as defined by the South Carolina Commission on Higher Education, to be eligible for consideration and may receive only one type of merit-based award from the state: Palmetto Fellows, LIFE or Hope scholarships.

If a recipient of any of the scholarships fails to meet the renewal criteria, appeal information is available from the South Carolina Commission on Higher Education web site at www.che.sc.gov.
Other Scholarships

Bell Tower scholarships and Paladin awards are available to incoming students based on the activities they were involved in during high school. Maintaining satisfactory academic progress is required for annual renewal.

Athletic Scholarships
Partial to full scholarships awarded in men’s and women’s intercollegiate sports. Contact our athletics staff to learn about scholarship opportunities. Students receiving athletics scholarships who receive any other type of financial aid must report any and all other means of support to the coaching staff of the scholarship sport.

Furman Scholars Program
Students are selected from eligible high schools their junior years, based on grades, standardized test scores, and extracurricular activities. Furman Scholars who enroll at Furman are each awarded at least $5,000 in institutional scholarship(s).

Legacy Scholarships
Renewable $10,000 scholarships awarded to students who have indicated on the application supplement that a parent or grandparent graduated from Furman University. If an admitted applicant is eligible for any Furman scholarship in excess of the amount of the Legacy Scholarship, the higher scholarship will be awarded and will replace the Legacy Scholarship.

National Merit Scholarships
National Merit/National Achievement finalists who indicate Furman as their first-choice college may be eligible for a renewable university-sponsored scholarship, in accordance with National Merit Scholarship Corporation guidelines. Students who demonstrate financial need may receive $2,000 in a renewable university-sponsored scholarship, and students who do not demonstrate financial need may receive a $1,000 renewable university-sponsored scholarship. This university-sponsored scholarship is awarded in addition to any other Furman scholarship or grant for which the student may be eligible.

Kittie Moss Fairey Scholarship Fund
Established to aid worthy entering first year students from South Carolina attending in-state institutions, the award is equal to half the cost of room, board and tuition. For details, write Wachovia, Kittie M. Fairey Scholarship Fund, Trust Department, Columbia, South Carolina 29202, or contact a high school guidance counselor.

C.G. Fuller Scholarship Fund
Established to assist deserving students from South Carolina attending schools within the state, the award is based on academic merit and financial need. For details, write C.G. Fuller Foundation, c/o Bank of America, S.C. 3-240-04-17, P.O. Box 448, Columbia, South Carolina 29202-0448.

J.E. Sirrine Scholarship Fund
The J.E. Sirrine Scholarship Program assists deserving graduates of Greenville County public high schools. For details, write Sirrine Scholarship Program, P.O. Box 2848, Greenville, South Carolina 29602. The application deadline is April 15.

Graduate Scholarships
Graduate fellowships and assistantships are available in Chemistry. Recipients render service in the department and generally are expected to enroll on a less than full-time basis. For information, consult the Chemistry Department.

Need-Based Financial Aid

Furman will normally offer the student a financial aid package that consists of gift-aid (grants and/or scholarships) and self-help (loans and student employment) to students with demonstrated need as determined by the FAFSA and CSS PROFILE. Funds from any source (Furman, federal, state or through outside organizations) are all considered part of a need-based financial aid package and are applied to the student’s demonstrated need first,
per federal regulations. Need-based programs commonly available at Furman are described below.

**Grants**

**Furman Grant**
Students may receive a Furman Grant along with other forms of assistance such as merit scholarships, student loans, and work study. Furman Grants are need-based, and eligibility is determined by the student’s CSS PROFILE. Furman Grant amounts remain constant throughout the student’s tenure at Furman. Exceptions to this are within the purview of the Office of Financial Aid in response to extreme increases in demonstrated need from one year to the next per the FAFSA and/or CSS PROFILE. Students must complete the FAFSA each year to maintain eligibility for the Furman Grant.

**Federal Pell Grant**
The federal government provides assistance to eligible students through the Pell Grant program. Eligibility for the Pell Grant is determined by the results of the FAFSA.

**Federal Supplemental Educational Opportunity Grant (SEOG)**
Supplemental Educational Opportunity Grants are awarded by Furman to students with exceptional financial need, defined as those students who are eligible for Pell Grant. SEOG funds are limited.

**South Carolina Tuition Grants**
South Carolina residents who have financial need as determined by the FAFSA and who have been legal residents of the state for at least one year prior to their entrance date may qualify for awards ranging up to $2,900. Students must be enrolled full-time (at least twelve credits) to be eligible to receive the maximum grant. For students to qualify, the FAFSA must be submitted no later than June 30. Funding is contingent upon state appropriations. These tuition grants may be reduced or eliminated if the student already receives tuition-sensitive scholarships.

### Student Loans

**Federal Perkins Loan**
Furman awards Perkins Loans to students who demonstrate exceptional financial need. The Perkins Loan is a 5% interest loan on which no interest is charged and no payments are made as long as the student is enrolled at Furman for at least six credits. Repayment begins nine months after the student graduates or ceases being enrolled at least half-time. Repayment of the Perkins Loan may extend over a ten-year period. Perkins funds are limited and loan amounts may vary from year to year.

**Federal Direct Student Loan Program**
Loans up to $5,500 are available to first year undergraduate students. After earning 28 credits, students may obtain a loan up to $6,500 for the sophomore year, and, upon earning 58 credits, students may obtain a loan of up to $7,500 per year for the remaining years of undergraduate study.

Federal Direct Loans are either subsidized or unsubsidized. In the case of a subsidized loan, the federal government pays the interest while the student is enrolled in an eligible institution at least a half-time. In the case of an unsubsidized loan, the student is responsible for interest payment while enrolled at least half-time. Repayment begins six months after the student graduates or ceases to be enrolled at least half-time. The maximum repayment period is ten years. Information on obtaining these loans may be found on our web site at www.furman.edu/finaid.

**Student Employment**

Federal Work-Study underwrites work on and off campus for students who qualify. Students may work at a variety of campus jobs at a rate of pay no less than the minimum wage. Award amounts average $1,500, which allows for students to work between ten and twelve hours per week. For more information about this program, contact the Student Employment Office.
**Alternative Financing**

**Tuition Payment Plan**
Furman recognizes that managing the cost of education is a challenge for some families. Through a program with Educational Computer Systems, Inc. (ECSI), we offer an affordable and convenient set of options for meeting the costs of the academic year. See the Expenses section of this catalog for more details.

**Federal Direct Parent Loan for Undergraduate Students (PLUS)**
Parents with an acceptable credit history may borrow up to the difference between the cost of education and the amount of financial aid the student is awarded. The interest rate is fixed at 7.9%. Repayment begins 60 days after the last disbursement of the academic year. Application procedures for the PLUS Loan may be found on our web site at www.furman.edu/finaid. Students must complete the FAFSA in order for a parent to apply for the PLUS Loan.

**Pickett & Hatcher Educational Funds**
Annual loans of $10,000 to residents of southeastern states based on financial resources and projected college costs. Simple interest is charged at an annual rate of two percent while a student maintains full-time enrollment and at six percent thereafter.
The application deadline is May 15. Contact Pickett & Hatcher, P.O. Box 8169, Columbus, Georgia 31908-8169.

**South Carolina Teacher Loan Program**
Available to South Carolina residents enrolled in the university’s teacher education program. Financial need is not a consideration, and the loans are canceled at the rate of 20 percent for each year recipients teach a critical subject or teach in a critical geographic area of the state. If a student teaches a critical subject in a critical geographic area, the loans are canceled at a rate of 33 percent annually.

Entering first year students must have ranked in the top 40 percent of their high school graduating class and have an SAT or ACT score equal to or greater than the state average for the year they graduated from high school or the most recent year for which such figures are available. Any enrolled undergraduate, including enrolled first year students, must have successfully completed the Praxis I Exam and have a cumulative grade point average of at least 2.750 to be eligible to receive this award.

**Revision of Financial Aid Awards**
Financial aid is dynamic and may change as new information becomes available to the Office of Financial Aid. Any financial aid package is subject to revision, even during the academic year, for reasons including, but not limited to, any of the following:

- An error is discovered through the verification of information reported on the FAFSA and/or CSS PROFILE which, when corrected, changes the student’s eligibility.
- A change occurs in regulations governing federal or state programs.
- Funding levels in federal or state programs are altered.
- The student receives additional financial assistance, including, but not limited to, outside scholarships, from a source not listed on the most recent financial aid award notification/letter.
- The student fails to meet satisfactory academic progress standards for renewal of financial aid.
- The Office of Financial Aid discovers any error, clerical or other, on your award.
- The student fails to complete required financial aid applications for need-based federal, state and/or institutional aid, including any documents required for verification of FAFSA information.
Any aid reduction based on these reasons will not be replaced by Furman-funded grants and/or scholarships.

**Additional Information**

Furman institutional scholarships and grants are available for a maximum of four years or eight semesters. Only athletic grants-in-aid are exempt from this standard, and only at the discretion of the Athletics Department.

Unless specifically directed otherwise, institutional scholarships and grants are renewable provided the student maintains satisfactory academic progress.

The main method of communication from the Office of Financial Aid to students is Furman e-mail. Students are expected to communicate with parents concerning financial aid award information, requirements, etc.

The total amount of Furman-funded gift aid (grants and/or scholarships) a student is eligible to receive may not exceed Furman’s direct cost of attendance. If the total amount of Furman-funded gift aid exceeds the direct cost of attendance, a portion of the Furman gift aid will be reduced accordingly.

A student may not receive gift aid (grants and/or scholarships) from all sources (Furman, federal, state, private) in excess of the total cost of attendance at Furman. If the total amount of gift aid from all sources exceeds Furman’s total cost of attendance, Furman gift aid (grants and/or scholarships) will be reduced accordingly.

All outside financial assistance or scholarships received by a student attending Furman must be reported to the Office of Financial Aid, including the annual amount of the award and whether or not the award is renewable. Furman reserves the right to make adjustments in the financial aid package offered to students who receive assistance from other sources.

When calculating Furman scholarships or grants based on tuition, fees, room and board, the amount used for room is the weighted average room cost as determined by Housing and Residence Life; the amount used for board is the current maximum meal plan rate.

Furman scholarships and grants are based on a course load of 12 - 20 credits in any given semester. Additional costs incurred by a student enrolled for more than 20 credits in a given semester will be incurred at that student’s expense.

Because Furman uses a comprehensive fee structure, Furman scholarships and grants are provided to students charged full-tuition, regardless of enrollment status (i.e. course load). Students approved for charges on a per-credit basis may have their Furman scholarships and/or grants prorated as tuition is prorated. Students planning to enroll for a single semester in a given academic year will receive aid for that semester only. Financial aid for an entire academic year will not be disbursed in a single semester.

**Tuition Exchange Programs**

**Associated Colleges of the South (ACS)**

Children of employees of ACS participating institutions are eligible to be considered for the ACS Tuition Exchange.

Furman’s agreement with the ACS indicates that for any given academic year, ACS “imports” (students attending Furman as an ACS Tuition Exchange student) will not exceed “exports” (children of Furman employees attending another ACS college under the agreement) by more than two students.

Each ACS Tuition Exchange recipient pays a participation fee of $1,500 per academic year. The ACS Tuition Exchange benefit is equivalent to full tuition at Furman and is renewable for three years provided the student meets satisfactory academic progress. With the exception of the Lay Scholarship, the ACS Tuition Exchange benefit replaces any Furman merit or talent-based scholarship already awarded to the student.
Those students awarded the Lay Scholarship will also receive the remaining cost of the Student Government Association fee, the weighted average room cost and funds to cover the maximum meal plan.

ACS Tuition Exchange benefits may be used for Furman-led travel study programs only. All other study away programs are ineligible for ACS Tuition Exchange benefits. Interested students must specify that admission is being sought under the ACS Tuition Exchange program, apply for all federal and/or state aid for which he or she may be eligible, and submit an ACS Tuition Exchange certification form completed by the appropriate official at the home institution certifying their eligibility for the exchange. Eligible students must meet Furman’s normal admission requirements.

**Tuition Exchange, Inc. (TE)**
Children of employees of TE participating institutions are eligible to be considered for the Tuition Exchange.

Furman’s policy for any given academic year is TE “imports” (students attending Furman as a TE student) will not exceed “exports” (children of Furman employees attending another TE college) by more than three students.

The TE benefit is renewable for three years provided the student meets satisfactory academic progress. With the exception of the Lay and Duke Scholarships, the TE benefit replaces any Furman merit or talent-based scholarship already awarded to the student. Those students awarded the Lay and Duke Scholarships will receive those funds in addition to the benefit, up to the remaining cost of the comprehensive tuition fee for Duke Scholars and up to the remaining cost of the comprehensive tuition fee, the Student Government Association fee, the weighted average room cost and funds to cover the maximum meal plan for Lay Scholars.

Interested students must specify that admission is being sought under the TE program, apply for all federal and/or state aid for which he or she may be eligible, and submit an TE certification form completed by the appropriate official at the home institution certifying their eligibility for the TE program. Eligible students must meet Furman’s normal admission requirements.

**Faculty-Staff Tuition Remission**
Consult Furman’s Human Resources web site at http://www2.furman.edu/sites/hr for specific information about this benefit.
**Academic Regulations**

Occasionally, changes are made to academic regulations at Furman. Unless otherwise indicated, such changes will be applicable to all students enrolled at the time the change is adopted as well as to all students who re-enroll after a period of absence.

**Academic Integrity**

The goals of the academic program are achieved only if all members of the university community uphold and comply with the highest standards of academic conduct. Honesty, respect, and personal responsibility are principles that guide academic life at Furman, in and out of the classroom. Plagiarism, cheating, inappropriate collaboration, and other misrepresentations of one’s own work threaten the values of the campus community. Accordingly, violations of the ethical standards of the institution will have severe consequences, such as failure in a course, and/or suspension or dismissal from the university.

Students at Furman have a serious responsibility to uphold academic integrity by behaving honorably in their own academic work and by promoting academic integrity among their peers. If students are uncertain about what constitutes plagiarism or any other form of academic dishonesty, it is their obligation to consult with faculty members so they fully understand what is expected.

For more information about academic integrity at Furman, students should consult with the Associate Academic Dean, The Helsman, or www.furman.edu/integrity.

**Requirements for the Bachelor’s Degree**

All candidates for the baccalaureate degree must be competent in reading with comprehension, communicating intelligibly both in speech and in writing, and solving problems which require fundamental critical and analytical skills.

General education courses, major field of study requirements, engaged learning opportunities and a strong program of undergraduate research offer a significant number of opportunities for students to acquire these competencies. Students seeking a bachelor’s degree from Furman University must:

- Successfully complete at least 128 credits with at least 60 of these credits earned through Furman courses including the final 28 credits.
- Maintain a grade point average of at least 2.00 in all course work completed through Furman.
- Complete all general education requirements.
- Complete the Cultural Life Program (CLP) requirement.
- Complete a major field of study of at least eight courses for the Bachelor of Arts or the Bachelor of Science degree or a major of at least thirteen courses for the Bachelor of Music degree.
- Submit an application for graduation to Academic Records.

The bachelor’s degree may also be conferred on a student pursuing a professional degree (engineering or industrial management) who began undergraduate study at Furman and who meets the following criteria:

- Attain approval of the planned degree program by the chair of the sponsoring academic department.
- Successfully complete at least 96 credits that contribute to the Furman bachelor’s degree before beginning course work elsewhere, including all general education requirements.
- Maintain a grade point average of at least 2.00 in all courses completed through Furman.
- Submit evidence of successful completion of appropriate first year course work for a professional degree or successful completion of one year’s courses in an approved dual-degree program.
• Complete the Cultural Life program (CLP) requirement.
• Submit an application for graduation to Academic Records.

Since the award of the bachelor’s degree is contingent upon earning at least 128 credits, a student may receive only one degree at the completion of these credits. Students meeting the requirements for more than one type of bachelor’s degree must inform Academic Records when submitting their application for graduation which type of degree they intend to receive.

Credit Award
Academic credit at Furman is awarded based on the successful completion of learning outcomes at an individual course level. All courses are approved by the university’s faculty through a process that requires review and action by all appropriate academic programs and the recommendation of a six-member elected curriculum committee. Course-level learning outcomes are usually described in syllabi developed by the instructor(s) of record for each course section in consultation with other faculty members in their academic department or associated programs.

Contact with the course instructor is a key component required for students to meet learning outcomes at Furman. Based on historically-informed standards, students should be in direct contact with course instructors for nine or more hours per credit. Furthermore, students are typically expected to engage in activities connected to the completion of course learning outcomes for three or more clock hours for every hour of contact they have with the course instructor. In keeping with accepted practice in American higher education, Furman uses the semester hour as the unit for expressing the completion of academic credit.

General Education
The general education curriculum is dedicated to providing students the opportunity to acquire the skills, the experiences and the knowledge needed to achieve broad philosophical, historical, aesthetic and scientific bases for understanding and judging human experience, in the hope that they will enjoy lives characterized by broad vision, self-knowledge, independent action, tolerance and concern for others.

As means to that end, the university requires all students to complete a set of courses designed to:

• Invigorate and stimulate intellectual curiosity
• Broadly prepare students in a diverse set of disciplines, including the humanities, natural sciences, social sciences, and the fine arts
• Encourage intellectual inquiry in sufficient depth to allow one to contribute to a greater body of knowledge
• Develop expressive capabilities in writing, speaking, and the arts
• Cultivate world citizenship—an understanding of those not like oneself
• Integrate knowledge into a meaningful synthesis

The general education requirements include:

Two first year seminars, which must include at least one writing seminar.

One of the seminars may be applied toward a student’s major, but neither seminar may be required for the major or be a specific prerequisite for another course.

First year seminars (FYS) will use the passions of the Furman faculty for ideas and discovery to ignite the interests and passions of students. Small, discussion-centered seminars encourage students to take responsibility for their own learning.
Both seminars will engage the material with the intention of fostering careful thought, intense discussion, and precise, vivid writing, while those designated as writing seminars (FYW) will explicitly devote significant pedagogical attention to the improvement of the student’s writing and the development of information fluency.

**Eleven courses meeting core requirements, which must include:**

*Each course can fulfill only one core requirement. No more than three courses from a single department may be used to satisfy the core requirements.*

- Two courses in the empirical study of the natural world, at least one with a separate laboratory component (NW and NWL)

Through these courses, students should understand how to study causality in the physical universe by constructing falsifiable hypotheses that are testable with evidence from the physical universe. Students should also be exposed to the major scientific theories within a discipline, and understand how these explanatory models were constructed and are currently applied. Students should also appreciate the tentative, progressive, and cumulative nature of scientific knowledge.

Students seeking the Bachelor of Music degree can fulfill this requirement by completing only one course. The course does not need to include a separate laboratory component. Bachelor of Science degree candidates must complete this requirement in courses appropriate for majors in the natural science (Biology, Chemistry, Earth and Environmental Science, Neuroscience, Physics, Sustainability Science) disciplines.

- Two courses in the empirical study of human behavior and social relations (HB)

These courses will have as an underlying focus the empirical methodologies employed to describe, understand, and predict the behavior of individuals and groups. The aim will be to foster an appreciation among students for the value and meaning of empirically derived knowledge in our world.

- A course using historical analysis to study past human interactions (HA)

Courses focus primarily on the historical development of human populations, institutions, and activities, as well as the methods and challenges involved in historical analysis. These courses will provide systematic descriptive coverage of particular places, groups, ideas, institutions, or societies as they moved through time.

- A course in the critical, analytical interpretation of texts (TA)

A reflective, critical approach to reading deepens aesthetic appreciation of the resources of language and sharpens the ability to assess and evaluate the documents and messages that inform us and influence our choices. Included in this category are courses in literary studies and other disciplines that study the structures and methods by which texts create and convey meaning.

- A course (or four-credit equivalent) in the visual and performing arts (VP)

Visual and performing arts courses will help students develop an appreciation for how music, theatre, film, digital and/or multimedia artworks, and the visual arts can enrich us as human beings, express the vision of individuals, speak to the human condition, and foster an understanding of other cultures, societies, and times. These courses will also introduce the notion of the arts as a language with its own vocabulary, grammar and expressive capabilities.

Students may fulfill this requirement with a four credit course aimed specifically at appreciation or they may choose to complete a series of courses in music performance focused on skills development. Students choosing to fulfill the requirement through skills development in music
performance studies must successfully complete one credit or more in a single instrument or voice during four consecutive semesters.

- A course in mathematical and formal reasoning (MR)

The courses that constitute this category all require the student to master rigorous techniques of formal reasoning and to apply the techniques of both formal reasoning and creative intuition in problem solving situations. Each course in this category will apply those techniques in the mathematical interpretation of ideas and phenomena, the creation and analysis of algorithms, and/or the symbolic representation of quantification, validity, proof, completeness, and consistency.

Students seeking the Bachelor of Music degree do not need to fulfill this requirement, while Bachelor of Science degree candidates must complete this requirement with a calculus course.

- A course in foreign language (FL)

The sustained, in-depth study of foreign languages is essential to appreciate other parts of the world and other moments of the past, as well as to develop a fuller understanding of one’s own world and one’s own language. To assure a meaningful acquaintance with a foreign language, all students will complete at least one course demonstrating proficiency in a foreign language, depending on their level of preparation, as determined by a placement exam.

Students seeking the Bachelor of Arts or Bachelor of Music degree are required to complete a course numbered 201 or greater in a foreign language discipline, while Bachelor of Science degree candidates are required to complete a course numbered 120 or greater in one of the same disciplines.

Students whose primary language is not English must satisfy the requirement in a language other than their primary language. One alternative for these students to meet the requirement is to substitute ENG-111 and one additional course in American literature, culture or civilization. Students seeking to pursue this option should consult with the Associate Academic Dean for a list of the courses approved by the department chairs in English, Classics, and Modern Languages and Literatures. These substitute courses may not be used to satisfy any other core general education requirement.

- A course considering ultimate questions (UQ)

Courses considering ultimate questions invite students to engage metaphysical, religious and ethical questions in a direct and explicit way by examining ways in which individuals and societies have articulated what constitutes a good and meaningful life—as that is reflected in various past or present cultural or individual understandings of our obligation to others; our relation to the transcendent; and how these find expression in a rich variety of written, oral, and performative texts.

- A course emphasizing the importance of the body and mind (MB)

Courses emphasizing the importance of the body and mind will support Furman’s mission statement expressing a commitment to “develop the whole person—intellectually, physically, socially, emotionally, and spiritually.” Students will gain a greater understanding and experience corporeality (i.e., bodily existence) in relation to intellectual, social, emotional, and ethical contexts keeping within the spirit of developing the whole person.
Two courses meeting global awareness requirements, including:

Courses fulfilling a global awareness requirement may also meet core or major requirements. A single course may not be used to fulfill both global awareness requirements.

- A course addressing humans and the natural environment (NE)

Humans are affecting the dynamics of the planet; they are changing the composition of the atmosphere, the currents in the oceans, and the productivity of natural ecosystems. Because modern societies require more energy, food, and materials than ever before, we are increasingly dependent on stable, productive, and sustainable natural systems. Ironically, our societies are becoming increasingly urban and increasingly insulated from nature just as these ineluctable dependencies are becoming increasingly important. In order to foster an appreciation for these dependencies, courses will emphasize some aspect of the interactive relationships between humans and the natural environment.

- A course focusing on world cultures (WC)

World cultures courses will help students achieve a heightened awareness of the diverse cultures and traditions that have formed our world, and to reflect on the relationships between their own and other cultures. Courses will focus on the traditions, beliefs, experiences, and expressions of peoples of, or originating from, Asia, Africa, Latin America, or the pre-colonial Americas.

Cultural Life Program (CLP)

Each student must attend a total number of CLP events equal to four times the number of semesters (fall and spring) in which he or she enrolled for courses on the Furman campus, not to exceed a total of 32 events. For example: a student enrolled on campus for four years (8 semesters) would be required to attend 32 CLP events, while a transfer student enrolled at Furman only two years (4 semesters) would be required to attend 16 CLP events.

Students are expected to attend CLP events regularly throughout their undergraduate career at Furman. Registration priority is based on class standing as determined by credits earned and CLP events attended.

The list of approved CLP events is updated weekly and available through the Furman web site at www.furman.edu/clp. Attendance at CLP events is carefully monitored. Students must present photo identification at each event they attend. No substitutions or alternatives to CLP attendance will be considered.

Major Field of Study

All students must declare a major once they have completed 58 (or more) credits via Furman courses; any student failing to do so will not be permitted to register for any future semester. Students choose courses that will contribute to the major in consultation with their academic advisor and the chair of the department. The student and department chair sign and retain a copy of the field of study declaration and major requirement checklist which specifically identifies courses each student should complete to fulfill major requirements.

Majors may be required to enroll in a seminar during the senior year, complete a comprehensive examination in the major, or earn a 2.00 grade point average in the major. Typically, at least 20 credits in the major must be completed through Furman courses.

More detailed information about major field of study requirements are provided in the Academic Departments section of this catalog.

Individualized Curriculum Program (ICP)

Students who have educational goals outside of majors offered at Furman may propose an individualized curriculum program. Students approved for the program select courses under the supervision of a faculty committee and the student’s advisor. In preparing the program, the student should keep in mind the following:
• Typically, a minimum of a 2.50 GPA is required.
• Proposed individualized curriculum programs should be consistent with Furman’s liberal arts philosophy.
• The program should contain thematically related courses that will meet the educational goals of the student.
• Individualized curriculum programs should not be used to concentrate work in a narrowly pre-professional way or to avoid certain courses in established major programs.
• The ICP may replace a traditional major, but students pursuing this option are still expected to complete all other graduation requirements.

The student should plan the program from among courses offered at Furman or courses at other institutions approved by the ICP committee. Generally, it will be to a student’s advantage to apply to the program no later than the conclusion of the sophomore year.

**Interdisciplinary Minors**

While all Furman students are required to successfully complete an academic major in order to receive a bachelor’s degree, students may also choose to supplement their major by studying a specific topic from the perspective of different academic disciplines.

A minor typically consists of four to six courses (16 to 24 credits) of related course work. At least 12 of the required credits should be completed in courses numbered 200 or greater. Electives applied toward an interdisciplinary minor may be enrolled with a pass-no pass grading option. Courses enrolled to meet major requirements may also fulfill interdisciplinary minor requirements.

Furman offers minors in Ancient Greek and Roman Studies, Black Cultures in the Americas, English for Speakers of Other Languages, Environmental Studies, Film Studies, Latin American Studies, Poverty Studies, Science Education and Women’s, Gender, and Sexuality Studies. A listing of courses and requirements for each interdisciplinary minor is included in the Interdisciplinary Studies section of this catalog.

**Graduation Honors**

Students who have earned at least 64 credits at Furman are eligible for graduation honors. Students earning a grade point average of at least 3.90 in all Furman course work are designated as summa cum laude graduates. Students earning a grade point average of at least 3.65, but less than 3.90 will be magna cum laude graduates and students earning a grade point average of at least 3.40, but less than 3.65 are considered cum laude graduates.

**Advising and Registration**

Students are assigned academic advisors with whom they should meet regularly to plan educational programs based on their interests, aptitudes, and educational goals. Advisors play an important role by offering informed advice about course selections, by providing information about co-curricular and extracurricular educational opportunities such as study away, internships, and undergraduate research, and by referring the student to campus support services. Students must consult with their academic advisor before registering for courses each term. Detailed information about advising and registration can be obtained through the Academic Records web site at www.furman.edu/registrar.

No student may register for any course after more than 10 percent of a term has passed, seven class days in a fall or spring semester. A fee of $100 will be charged for late registration after established deadlines have been reached. Absences caused by late entrance into a course will count in the student’s attendance record.

All students should be aware that the final responsibility for satisfying graduation requirements is the student’s, not the academic advisor’s. Each student is responsible for his or her own enrollment.
Individualized Instruction
(Internships, Independent Study, Research, and Tutorial Courses)

Internships, Independent Study, and Research opportunities offered on a “for-credit” basis are available in many academic departments each term. Students should consult with the department of interest to determine their eligibility for this type of instruction and identify a faculty member to supervise the internship, independent study, or research experience. Approval for completing this type of experience should be gained before the term in which the work will be done.

No more than 12 credits earned through internships, independent study, and research may contribute to the 128 credits required for the award of the bachelor’s degree. Content of courses already published in this catalog may not be offered through independent study. Traditional courses may be enrolled on a tutorial basis through arrangement with the offering department. Courses offered in this format will be registered with the same course number and title.

Class Standing

Class standing is updated globally at the conclusion of each term. Class standing will be updated on an individual basis during a term if final grades for previously enrolled courses are submitted, transfer credit is accepted, or course equivalencies are posted based on the results of testing, such as AP or IB exams.

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Credits Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>fewer than 28</td>
</tr>
<tr>
<td>Sophomore</td>
<td>between 28 and 57</td>
</tr>
<tr>
<td>Junior</td>
<td>between 58 and 87</td>
</tr>
<tr>
<td>Senior</td>
<td>88 or more</td>
</tr>
</tbody>
</table>

Registration priority is based on class standing as determined by credits earned and CLP events attended.

Enrollment Status

Full-time students must be registered for a minimum of 12 credits each semester. The normal course load for the academic year is 32 credits; 16 credits in each semester, both fall and spring.

Students may not be enrolled at Furman and another college or university during the same term.

Study Away

Furman offers a wide variety of options for studying away from campus each year. Student participation is typically planned significantly in advance and is competitive. Consult with the Office for Study Away and International Education for more information about how participation for each program is determined.

Participants in Furman sponsored travel study programs are accompanied by faculty members who coordinate and direct the programs. All credits and grades earned away from campus in these programs are granted on the same basis as those earned on campus. Participants in semester-long programs typically enroll in four courses for which they can earn up to 16 credits.

Affiliate and exchange programs provide further opportunities for Furman students to study away from campus through partnerships with other universities all over the world. Typically, transfer credit is awarded for the successful completion of courses approved in advance by Furman and the cooperating institution. No more than 20 credits completed in a given term elsewhere can be considered.

Students may not enroll for campus-based independent study courses while participating in any Furman-sponsored study away experience. Students may also not enroll beyond the standard course load expected for the specific study away experience without prior approval. Some faculty-led study away experiences require students to reside on campus either before the start of travel or upon their return to campus after the travel portion of the experience is complete. In this
instances, student participants in these study away experiences may not enroll for any type (credit-bearing or zero credit) of on-campus instruction without prior approval. Exceptions will be granted only in extraordinary circumstances with the approval of the Associate Academic Dean and the Assistant Dean for Study Away & International Education.

**Course Overload**

Students in good academic standing (i.e., not on academic probation) may enroll for up to 18 credits a semester. Students with a grade point average of 3.30 or greater in their past 32 credits attempted may register for up to 20 credits in a single semester. Typically, students who have not yet attempted 28 credits at Furman are not permitted to overload.

All other requests to register for more than the normal course load of 16 credits a semester will be granted only in extraordinary circumstances with the approval of the Associate Academic Dean. Additional tuition charges will apply for each credit beyond 20. Any registrations exceeding the normal course load may only be accomplished after the Initial Course Election process has been completed.

Students permitted to register for an overload while on study away will be assessed tuition for any credits beyond the standard course load expected for the specific study away experience consistent with the per-credit charge in effect for the term in question.

**Course Auditing**

Students may enroll in courses on a zero credit basis by registering as an auditor. They may register to audit courses during the course adjustment period.

Students seeking to audit a course in which they have previously received credit must receive permission from the course instructor and the appropriate department chair. The inverse is also true in that once a course has been successfully audited, students must gain permission from the course instructor and department chair to complete the course again for credit.

Typically, tuition for course auditing is 50 percent of the standard per credit rate. Students obligated to the comprehensive tuition fee may not have to pay additional tuition to audit a course. Please see the Student Business Center for specific information.

**Guest Learners**

Members of the community, not currently enrolled at the university on any basis, may regularly observe or participate in instruction with the permission of the instructor strictly on a space-available basis. The participation will NOT appear on an academic transcript. A $200 administrative fee will be assessed for this type of participation to address costs associated with the instruction.

**Credit by Examination (Course Challenge)**

With the approval of the instructor who will administer the exam, the chair of the department in which the course is offered and the Associate Academic Dean, any student seeking a degree at Furman may earn credit for a course by demonstrating mastery by examination. Students may not challenge an independent study, research course or any course for which they previously enrolled either for credit or as an auditor. Moreover, a course challenged may not be enrolled with a pass-no pass grading option. Students should consult with the instructor to determine examination requirements and standards before registering for the course challenge. The student should expect no more assistance than being informed of the material to be covered on the exam. Under no circumstances will a student be permitted to attend class meetings of the course being challenged.

Course challenges should be registered through Academic Records during the normal registration period for the term. A credit by examination
fee of $100 will be charged if the challenge is outside the bounds of the comprehensive tuition fee. The examination must be completed before the end of the term in which it is registered. The grade earned for the examination will appear on the permanent academic record consistent with courses that yield traditional letter grades.

Class Attendance

The instructor sets the attendance requirement for each course. The following guidelines should be considered in effect unless otherwise stated: Freshman will be withdrawn from a course if absent, for any reason, 15 percent of the class meetings. Sophomores, juniors, and seniors will be withdrawn from a course if absent 25 percent of the class meetings. In both cases, a failing (F) grade will be recorded unless the absences were due to providential reasons, in which cases a withdrawal (W) grade may be assigned after consultation with the Associate Academic Dean.

Course Adjustment and Withdrawals

Students may drop a course with no designation on the permanent academic record during the course adjustment period each term. The course adjustment period includes the first ten percent of class days each term, seven days of classes in both the fall and spring semester.

Course withdrawals occurring between the end of the course adjustment period and the midpoint of each term will be designated as a withdrawal (W) in the student record. The withdrawal period concludes after one half of the term has been completed, the thirty-fifth day of class in both the fall and spring semesters. The withdrawal deadline in both the fall and spring semester is extended by ten percent of class days, seven days of class each semester, for new students (freshmen or transfers).

Examinations

All courses conclude each term with a final examination. Exceptions must be approved by the appropriate department chair and the Associate Academic Dean. Any instructor who wishes to administer the final examination at a time other than the one specified on the final exam schedule must secure the approval of the department chair and the Associate Academic Dean.

Students are expected to take examinations when scheduled. Exceptions, which must be approved by the Associate Academic Dean, are granted only in cases of extreme extenuating circumstances. Exceptions are normally not granted for reasons related to family or personal travel.

Grading

Traditional letter grades at Furman include:

- **A**: Excellent. The mark of highest distinction earned by those students whose work represents the best that can be expected of a student at Furman.

- **B**: Good. The mark of distinction earned by those students whose work represents a high degree of achievement in meeting the characteristic demands of the course.
C  Satisfactory. The mark earned by those students who have attained such familiarity with the content of the course and such ability to apply this knowledge as may be expected of a student who gives to the course a reasonable amount of time, effort, and attention.

D  Marginal. The lowest passing grade representing inferior work. It indicates that the student would be seriously handicapped in attempting subsequent courses for which this work is a prerequisite.

F  Failure. The mark indicates unconditional failure. No credit earned.

Course enrolled on a pass-no pass basis will be graded:

P  Passing. The mark indicates satisfactory or more than satisfactory completion of course requirements.

PD  Marginal Pass. The mark equates to a traditional letter grade of D.

NP  Not Passing. The mark equates to a traditional letter grade of F. No credit earned.

Zero credit courses are graded:

S  Satisfactory.

U  Unsatisfactory.

Other final grades include:

AU  Audit. Satisfactory completion of an audited course.

W  Withdrawal. The mark indicates a student withdrew from the course before its completion. Withdrawal marks at Furman do not include an evaluative component, passing or failing.

Temporary designations may include:

I  Incomplete. The designation signifies that the work of the course has not been completed or the examination has been deferred because of illness or some other cause beyond the control of the student.

NR  Not Reported. The designation indicates that the course instructor has not reported the student’s grade.

TS  Travel Study. The mark indicates that grades are still pending for a Furman travel study course.

Q  Question. The mark indicates an administrative issue is pending concerning this course.

CIP  Course In Progress.

Incomplete designations are to be recorded only when the instructor is convinced that a student has been unavoidably prevented from completing the required work in a course. Incomplete grades must be changed no later than 40 calendar days after the final grade deadline for the term in which the course or courses will be transcripted. Incomplete grades for students on academic probation must be changed to permanent grades no later than the start of the following semester. All incompletes are converted to failing grades after this deadline has been reached.

The temporary grades of Not Reported and/or Question must be resolved by immediate action. Travel study grades are expected to be replaced by a final grade no later than 40 calendar days after the final grade deadline in which the course or courses will be transcripted, while marks of Course In Progress are typically addressed at the conclusion of a specific future term clearly defined at the beginning of the course.

A student who has a question concerning a grade should discuss the matter with the instructor as soon as possible. If after such consultation the student believes that the assigned grade resulted from error or malfeasance, the grade may be formally appealed under procedures published in the Faculty Handbook. Copies of these procedures are available from the Associate Academic Dean.

Final grade assignments may be refined utilizing plus and minus grades. All grades correspond to quality point values that determine a student’s grade point average. For each hour attempted, letter grades earn quality points as follows:
ACADEMIC REGULATIONS

The grade point average is computed by dividing the total quality points earned at Furman by the number of credits attempted in courses for which the student received a traditional letter grade (A-F). For academic purposes, grade point averages are always rounded to two decimal places.

**Pass-No Pass Grading Option**

The pass-no pass grading option encourages students to enrich their education beyond the general education requirements, their majors, and areas of academic strength. A student may elect to enroll up to 12 credits through the pass-no pass grading option during their undergraduate career at Furman. No student may elect the pass-no pass option for more than 8 credits in a single term. Students on academic probation may not exercise this option, nor may any student who has ever been suspended for academic reasons.

Courses enrolled through the pass-no pass grading option may not satisfy a general education requirement, satisfy a major requirement, or be part of a Furman-sponsored study away program. Further, foreign language or mathematics courses may not be enrolled through the pass-no pass grading option until the student has satisfied the general education requirements in foreign language or mathematics and formal reasoning, respectively.

Students may not elect the pass-no pass grading option for any course offered through their major department. A course in which a passing (P) or marginal pass (PD) grade has been recorded may not contribute to a student’s major requirements unless specifically approved by the major department, while any course in which a not passing (NP) grade has been recorded for a major requirement may retroactively be converted to a failing (F) grade if the approval had not been obtained.

Exceptions to use the pass-no pass grading option for courses associated with study away programs may be requested by individual program directors and will be granted only with the approval of the Associate Academic Dean and the Assistant Dean for Study Away and International Education.

Students may elect the pass-no pass grading option for any course they have enrolled consistent with stated eligibility rules no later than the midpoint of the term in Academic Records. At that time, students indicate the lowest acceptable traditional letter grade for the course that they would accept. Instructors are not aware of which students have elected the pass-no pass grading option. At the end of the term they will submit a traditional letter grade for each student. If the traditional letter grade earned is equal to or greater than the lowest acceptable grade designated by the student, the traditional letter grade is recorded. Traditional letter grades below the lowest acceptable grade designated by the student are converted as follows: satisfactory or better (C- and higher) to passing (P); marginal (D+, D, and D-) to marginal pass (PD); and failing (F) to not passing (NP). Grades of P, PD and NP do not affect student grade point averages. Students may alter the lowest acceptable grade designation in Academic Records until the conclusion of the course adjustment period of the next semester.

Withdrawal from a course graded through the pass-no pass grading option will not contribute to the 12 credit limit. All courses that a student completes through the pass-no pass grading option contribute to the 12 credit limit, regardless of the final disposition of the grade, converted or not. Courses graded on a pass-no pass basis only do not contribute to meeting the 12 credit pass-no pass grading option limit.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.00</td>
</tr>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.70</td>
</tr>
<tr>
<td>D+</td>
<td>1.30</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>0.70</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Grade Reports

Final grades must be submitted within 48 hours after the conclusion of the examination period, excluding Sundays, to Academic Records. Students may access their grades for the term via the ARMS (Advising and Registration Made Simple) tool as soon as they have been verified.

Dean's List

Full-time candidates for an undergraduate degree who earn a grade point average of at least 3.40 during any regular term are included on the Dean's List at the end of that term. Students must successfully complete at least 12 credits in courses with traditional letter grades during a semester to be eligible. Students with outstanding incomplete designations for the term in question do not qualify.

Academic Probation

Students are placed on academic probation if they have not earned the minimum grade point average indicated below based on credits attempted:

<table>
<thead>
<tr>
<th>Each semester in which cumulative credits attempted are</th>
<th>Minimum grade point average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 or fewer</td>
<td>1.40</td>
</tr>
<tr>
<td>Initial term in which cumulative credits attempted are</td>
<td></td>
</tr>
<tr>
<td>17-28</td>
<td>1.58</td>
</tr>
<tr>
<td>29-36</td>
<td>1.62</td>
</tr>
<tr>
<td>37-50</td>
<td>1.70</td>
</tr>
<tr>
<td>51-68</td>
<td>1.80</td>
</tr>
<tr>
<td>69-82</td>
<td>1.90</td>
</tr>
<tr>
<td>83-99</td>
<td>2.00</td>
</tr>
<tr>
<td>100+</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Credits attempted for the purposes of academic probation include all work at Furman plus any credits earned elsewhere contributing toward the degree (AP, IB, transfer credits). Credits transferred to Furman are not used in computing grade point averages, however.

Student records are reviewed every semester until the student has more than 16 credits attempted; between 17 and 99 credits, records are reviewed only the first term (including summer) in which the number of credits attempted falls in each specified range. Beginning with 100 credits attempted, student records will be reviewed at the end of each term regardless of the number of credits enrolled. At this juncture, students who do not have a 2.00 grade point average will be placed on academic probation.

Students who are on academic probation are not eligible to overload, transfer in course credit, nor enroll a course on a pass-no pass basis. Students who are eligible to enroll for the spring semester will automatically be eligible for May Experience, regardless of probation status.

A student failing to meet the standards described above at two consecutive review points will be suspended from Furman. The student may not enroll again at Furman until two semesters have elapsed. To re-enroll, the student must apply through the Associate Academic Dean.

Any student suspended for incurring a second successive term of probation may, if academic circumstances warrant such consideration, petition the Appeals Committee to set aside the suspension. The committee will consider each request on its merits, based on what the committee believes to be the student’s probability of ultimate academic success. Among factors a petitioning student may cite in support of the request are: a grade point average of at least 2.00 during the most recent term or terms of enrollment; a grade point average within .10 of that required under the regulations at the end of the most recent term of enrollment; written statements of support from faculty members; evidence that poor academic performance resulted from extra-academic
factors no longer applicable or from an unwise curriculum choice which has subsequently been corrected.

Students who do not appeal suspension or whose appeal is denied may petition the Appeals Committee for the chance to apply for re-admission only after one semester away from Furman. The student should be able to demonstrate convincingly that one semester of suspension has been sufficient.

All decisions about re-admission will be based on the strength of the case made in support of re-enrollment. Students should consult with the Associate Academic Dean about the timing of the appeals and re-admission processes.

A student re-admitted after suspension or one whose suspension has been set aside by the Appeals Committee placed on academic probation an additional two successive times will be dismissed from Furman University. Such a student may appeal the dismissal in the same manner in which a suspended student may appeal. If a student who has been dismissed wishes to re-enroll, that student must apply through the Appeals Committee.

Repeating Courses

Degree-seeking students at Furman may not repeat for credit a course for which a passing grade has previously been awarded at Furman. A student may repeat a failed course, in which case both the failing (F) grade and the subsequent passing grade will appear on the academic record and be calculated in the grade point average.

Transfer Credit

A student may transfer credit to Furman from another regionally accredited institution for courses that are equivalent to Furman offerings or that would otherwise fit into the liberal arts curriculum at the university, for which a satisfactory grade (C- or better in a traditionally graded course) was recorded.

Typically, courses completed before a student has graduated from high school will not be considered equivalent to Furman offerings. A student can transfer no more than 64 credits from a two-year college. Once students have earned 64 credits that will contribute to the award of a bachelor’s degree at Furman, they can no longer transfer any credit from a two-year college.

Furthermore, because at least 60 credits must be earned through Furman courses, students may apply no more than 68 credits from any combination of institutions toward the degree. Students should also be mindful that the last 28 credits must be earned through Furman courses.

Furman students seeking credit for a course enrolled at another institution are required to consult with Academic Records before they begin the coursework elsewhere to ensure its equivalency. Transfer course authorizations and additional information about the process may be obtained through Academic Records. Students on academic probation cannot transfer credits into Furman and students cannot transfer credit from another institution for a course which he or she has failed at Furman.

Furman will not award transfer credit for courses completed in any country on the U.S. State Department travel warning list. Consult the list at travel.state.gov.

Students completing a course at Furman for which they have previously received credit via transfer or exam equivalency forfeit the initial credit award.

Leave of Absence

A request for a leave of absence is made to the Associate Academic Dean prior to the term for which the absence is requested. A leave will normally be one semester. Under no circumstances shall the leave extend beyond one year. Financial aid requirements, registration deadlines, and all other University obligations are the same for students returning from a leave of absence as stated for students whose enrollment at Furman has continued uninterrupted.
Students planning on traveling to any foreign country during a leave of absence from Furman must sign a waiver in order for the leave to be approved.

Withdrawal from the University

Students intending to permanently discontinue enrollment must initiate a withdrawal from the university by submitting a request to Academic Records. Any withdrawals from the university during an academic term must be reviewed by the Associate Academic Dean.

An online exit interview located on the Academic Records website (www.furman.edu/registrar) should also be completed by all exiting students regardless of withdrawal date, during a term or after the term has been completed.

If a student withdraws from the university after the withdrawal deadline for courses in a given term, the student record will normally reflect a withdrawal (W) designation in those courses in which the student had passing grades at the date of withdrawal. A failing (F) grade will be recorded in those courses in which the student had failing grades at the date of withdrawal. Grade determinations for student withdrawals necessitated by serious illness, injury or similar emergencies will be made at the discretion of the Vice President for Student Life and/or the Associate Academic Dean.

Transcripts of Student Records

Students may request that a transcript of their permanent academic record be forwarded to a third party through Academic Records. All transcripts reflect a summary of the student’s complete academic record. No transcripts will be issued without a request including the student’s legal signature. Transcripts will not be issued for a student who has outstanding obligations, financial or otherwise, to the university.

Appeals

Students may petition the Appeals Committee for an exception to academic requirements and regulations as set forth in this catalog or as approved by the faculty only under extraordinary circumstances. Appeals must be initiated in a timely manner through the Associate Academic Dean. The deadline for course-based appeals is the end of the second semester following the completion of the term in which the course was enrolled. The student must present the appeal containing the reasons for the request in writing to the Associate Academic Dean. The Appeals Committee will notify the student in writing of its decision. Any student seeking to further appeal a decision of the Appeals Committee must file a written statement of their intention within fifteen calendar days of the decision. The final appeal, presented to the Vice President for Academic Affairs and Dean, must state specific grounds for the review or any additional circumstances that might alter the case. The student will be notified in writing of the final decision.
Academic Departments and Courses

Departments are key to administering the academic program at Furman. Each is responsible for the oversight of major programs and offering courses in one or more disciplines.

Anthropology Program (ANT)
  B.A., Anthropology

Art (ART)
  B.A., Art History
  B.A., Studio Art

Asian Studies (AST)
  B.A., Asian Studies
  B.A., Chinese Studies
  B.A., Japanese Studies

Biology (BIO)
  B.A., Biology
  B.S., Biology

Business and Accounting (ACC, BUS)
  B.A., Accounting
  B.A., Business Administration
  B.L.A., Accounting
  B.L.A., Business Administration

Chemistry (CHM)
  B.S., Chemistry
  M.S., Chemistry

Classics (CLS, GRK, LAT)
  B.A., Classics
  B.A., Greek
  B.A., Latin

Communication Studies (COM)
  B.A., Communication Studies

Computer Science (CSC)
  B.A., Information Technology
  B.S., Computer Science
  B.S., Computing & Applied Mathematics
  B.S., Information Technology

Earth and Environmental Science (EES, SUS)
  B.A., Earth and Environmental Science
  B.S., Earth and Environmental Science
  B.S., Sustainability Science

Economics (ECN)
  B.A., Economics
  B.A., Mathematics-Economics
  B.S., Mathematics-Economics

Education (EDU, GGY)
  B.A., Education
  M.A., Education

English (ENG)
  B.A., English

Health Sciences (HSC)
  B.A., Health Sciences
  B.S., Health Sciences

History (HST)
  B.A., History

Mathematics (MTH)
  B.A., Mathematics
  B.A., Mathematics-Economics
  B.S., Computing & Applied Mathematics
  B.S., Mathematics
  B.S., Mathematics-Economics

Military Science (MSL)

Modern Languages and Literatures (CHN, FRN, GRM, HND, ITL, JPN, LNG, MLL, SPN)
  B.A., French
  B.A., German Studies
  B.A., Spanish

Music (MUS)
  B.A., Music
  B.M., Composition
  B.M., Church Music
  B.M., Music Education
  B.M., Music Theory
  B.M., Performance

Neuroscience Program (NSC)
  B.S., Neuroscience
Philosophy (PHL)  
B.A., Philosophy

Physics (PHY)  
B.S., Physics  
B.S., Pre-Engineering

Political Science (PSC)  
B.A., Political Science

Psychology (PSY)  
B.A., Psychology  
B.S., Psychology

Religion (REL)  
B.A., Religion

Sociology (SOC)  
B.A., Sociology

Theatre Arts (THA)  
B.A., Theatre Arts

Urban Studies Program (UST)  
B.A., Urban Studies

Courses are also offered through Interdisciplinary Studies in a variety of areas: ADC, EST, FST, FYS, FYW, LAS, HUM, IDS, MES, MXP, SCI, WGS

**Course Identifiers**

Courses at Furman are typically identified by codes separated into three distinct parts. The first segment designates the academic subject of the course, the second component relates to the level of instruction, and the final element (when displayed) assists with the identification of the meeting times and location for individual course sections.

Credit bearing undergraduate courses typically are numbered between 100 and 599, graduate instruction is typically numbered between 600 and 999, while zero credit experiences frequently have numbers between 001 and 099. Undergraduates can further expect courses numbers to reflect:
Anthropology Program

Professors: Siegel (Director), Yagi
Associate Professor: L.I. Knight
Assistant Professor: Blumenfield

A major in anthropology consists of eight or more four-credit courses and must include:

- ANT-101, 105 and 401,
- at least one course focused on a specific region of the world,
- at least one course focused on a specific anthropological topic, and
- at least three additional courses with either a regional or topical focus.

Students planning to major in anthropology should consult with the program director to select specific courses suited to their individual interests and needs.

For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that may also satisfy the requirements for the major.

Regional Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANT-202</td>
<td>Peoples of Black Africa</td>
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<tr>
<td>ANT-203</td>
<td>Cultures of the Non-Western World</td>
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<tr>
<td>ANT-204</td>
<td>Understanding Modern Japanese Society through Film</td>
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<tr>
<td>ANT-205</td>
<td>Japanese Popular Culture</td>
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<tr>
<td>ANT-210</td>
<td>Anthropology of China</td>
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<tr>
<td>ANT-211</td>
<td>Mayan Archaeology</td>
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<tr>
<td>JPN-225</td>
<td>Japanese Cinema</td>
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<tr>
<td>REL-223</td>
<td>Hindu Cultures and Religious Worlds</td>
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<tr>
<td>REL-227</td>
<td>Religions of South Asia</td>
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<td>REL-325</td>
<td>Women and Power in Hinduism</td>
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Topical Courses:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANT-110</td>
<td>Human Evolution</td>
</tr>
<tr>
<td>ANT-302</td>
<td>Anthropology of Ethnicity</td>
</tr>
<tr>
<td>ANT-303</td>
<td>Cultural Ecology</td>
</tr>
<tr>
<td>ANT-344</td>
<td>Anthropology of Religion</td>
</tr>
<tr>
<td>ANT-501</td>
<td>Independent Study</td>
</tr>
<tr>
<td>CLS-211</td>
<td>Classical Archaeology</td>
</tr>
<tr>
<td>FYS-1110</td>
<td>Greece and Japan: Connections and Comparisons</td>
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<td>FYS-1181</td>
<td>Magic and Religion</td>
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<td>FYW-1117</td>
<td>Magic and Religion</td>
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<td>LNG-210</td>
<td>General Linguistics</td>
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<td>Linguistic Analysis</td>
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<td>LNG-230</td>
<td>Language as Social Phenomenon</td>
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<tr>
<td>LNG-240</td>
<td>The Origin of Language</td>
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</table>

Anthropology (ANT) Courses

101 Cultural Anthropology
*GER: HB (Empirical Study of Human Behavior) and WC (World Cultures)*
Introduction to social and cultural anthropology. Topics include the comparative study of subsistence regimes and economics, stratification and political organization, marriage and kinship, culture and personality, religion, and social and cultural change. 4 credits.

105 World Prehistory
*GER: HB (Empirical Study of Human Behavior) and WC (World Cultures)*
An introduction to physical anthropology and archaeology. Topics include human evolution, human physical variation, the peopling of the world, the origins of food production and a comparison of complex societies around the world. 4 credits.

110 Human Evolution

Beginning with the earliest bipedal hominins, six to seven million years ago, human evolution will be considered, including the emergence of the genus Homo (with fire, speech, and the first migration out of Africa), the debate over the origins of Homo sapiens, the peopling of the world, the realities of human physical variation, and the mistaken idea of race. May Experience ONLY. 2 credits.

202 Peoples of Black Africa
*GER: WC (World Cultures)*
Social and anthropological survey of the diverse peoples in contemporary sub-Saharan Africa. 4 credits.

203 Cultures of the Non-Western World
*GER: WC (World Cultures)*
Ethnographic survey of African, Asian, Middle Eastern, and Latin American societies. Focuses on ecological adaptation, politics, and sociocultural change and male-female relations. 4 credits.

204 Understanding Modern Japanese Society Through Film
*GER: VP (Visual & Performing Arts) and WC (World Cultures)*
Survey of various facets of modern Japanese society and culture, including family, community, ethnicity, life cycle, education, gender, religion, work, popular culture, as well as cultural aspects of economic and political systems through readings and films. 4 credits.

205 Japanese Popular Culture: Anime, Manga and Beyond
*GER: VP (Visual & Performing Arts) and WC (World Cultures)*
Introduction to contemporary popular Japanese culture that has become globally popular, including Japanese animated films, Manga cartoon, video games, Cosplay (costume play...
enactment of video game and anime characters), J-Pop music, and karaoke. Through watching, listening, selected readings, and discussion, issues of gender, cultural identity, sexuality, technology, hybridity and globalization will be addressed. 4 credits.

209 Gender in East Asia
GER: HB (Empirical Study of Human Behavior) and WC (World Cultures)
An examination of gender in East Asia from an anthropological perspective. It establishes broad frameworks for analyzing sexuality and gender in Asia and encourages close readings of individuals’ life experiences. Past scholarly engagements with gendered Asia and ongoing Orientalist interpretations will be discussed. Specific topics may include gender-based discrimination, activism, kinship systems, regional variations in approaches to sexual orientation, migration, and sex work. Students will analyze media to examine how representations of gender in East Asia are produced. 4 credits.

210 Anthropology of China
GER: WC (World Cultures)
Key concepts and major historical developments within anthropological frameworks in twentieth-century China including ethnographic studies of social change and everyday life during the Mao and Post-Mao eras. Topics examined include nation-building, capitalist development, gender, class, ethnicity, mobility, education and labor. 4 credits

211 Mayan Archaeology
Travel-study course focusing upon the Maya peoples of Mesoamerica. Examining what their glyphs, household, settlement, and urban archaeology reveal about the history and culture of the ancient Maya. May Experience ONLY. 2 credits.

302 Anthropology of Ethnicity
GER: HB (Empirical Study of Human Behavior)
Ethnic, racial, and religious minorities in America and around the world. Ethnicity and ethnocentrism, race and “scientific” racism; stigmatization and prejudice; assimilation and pluralism; primordialism and circumstantialism; nationalism and identity politics. 4 credits.

303 Cultural Ecology
GER: HB (Empirical Study of Human Behavior) and NE (Humans and their Natural Environment)
A comparative survey of how people, culture, and the environment interact -- both when people and their culture adapt to environmental change, and when they adapt to the changes they have caused. Readings include both classic studies as well as current research, with particular emphasis upon subsistence regimes and their attendant scales of social organization, and upon the role of cultural institutions in shaping ecological relationships. 4 credits.

344 Anthropology of Religion
GER: WC (World Cultures)
Examining religion as a cultural phenomenon and from a comparative and holistic perspective on the beliefs and practices used to make sense of this and other worlds, their places within them, and to solve pressing, life and death problems. Topics include myth and symbols; rituals and religious specialists; altered states of consciousness and healing; witchcraft, divination, and magic; ghosts, souls, and ancestors; revitalization andmillennial movements; and globalization and transnational change. 4 credits.

401 Anthropological Methods and Theory
Prerequisite: SOC-101 or ANT-101
History of theory and practice in social and cultural anthropology from the “armchair evolutionists” of the late 19th century to the symbolic and interpretive anthropologists of the late 20th century. 4 credits.

501 Independent Study
Prerequisite: instructor permission
Prospectus for study must be presented to instructor and approved in the term preceding registration for the course. Variable credit.
Art

Professors: Chance, Watson
Associate Professors: Bright, Brodeur, McClain (Chair), Watkins
Adjunct: Allwright, Faulkenberry, Lott, Miller, Strother

The department offers majors in art history and studio art. To graduate with a major in art history or studio art, a student must have at least a 2.00 grade point average in all art courses.

All majors must complete:
• ART-130 and 131

Students who plan a major in studio arts must also complete:
• ART-111, 112, 113, and 124,
• ART-330 and 401,
• 16 additional credits of studio arts which can also include THA-115, 116, 315, 316 or 317,
• a final exhibition of their work and a public presentation on their work.

Students who plan a major in art history must also complete:
• four upper-level courses in Western art history, numbered between 200 and 299, including at least one from each of the following areas: Ancient, Medieval, Renaissance/Baroque and Modern,
• one upper-level course in non-Western art history, numbered between 200 and 299,
• ART-330,
• at least one more course: an additional upper-level art history course numbered between 200 and 299, an art internship, a first year seminar focused on art history, or an approved art history course completed on study away, and
• one studio art studio course.

Additional essential information on major requirements is available on the web at http://www2.furman.edu/academics/Art/Pages/default.aspx.

Students who plan graduate study in art history should enroll in either German or French (Spanish only if appropriate for intended graduate program). A reading proficiency in at least one foreign language (typically achieved in the second intermediate course here at Furman) is also typically required for graduate study.

Art (ART) Courses

101 Art for Non-Art Majors
Introductory studio course providing an in-depth hands-on experience for non-art majors to include a variety of two dimensional and/or three dimensional media and techniques. 4 credits.

111 Visual Language I
GER: VP (Visual and Performing Arts)
Fundamentals of two-dimensional design explored through lectures and class projects with an integration of graphic design as a problem-solving tool. Conceptual development and the formal elements of design are introduced which include type, image and creative software. Students will explore design elements and principles through traditional media and software exercises. 4 credits.

112 Visual Language II
GER: VP (Visual and Performing Arts)
Study of the elements and principles of three-dimensional design. Lectures and projects explore concepts for working in the three-dimensional format. 4 credits.

113 Visual Language III
GER: VP (Visual and Performing Arts)
Theory of color with painting principles and techniques. Exploration of color relationships based on Johannes Itten’s seven areas of chromatic contrasts. Theory will be used in specific exercises and in paintings from direct observation that implement defined color theory concepts. 4 credits.

124 Drawing
GER: VP (Visual and Performing Arts)
Study of drawing, including the elements of art and composition, with extensive exercises from direct observation, including one- and two-point perspective. A variety of drawing media are explored. 4 credits.

130 History of Western Art I
GER: VP (Visual and Performing Arts)
Survey of Western Art through the Middle Ages, including style, iconography, and cultural context. 4 credits.

131 History of Western Art II
GER: VP (Visual and Performing Arts)
Survey of Western art from the Renaissance to the present, considering style, iconography, cultural context. 4 credits.
200 Ceramics I
Prerequisite: ART-113 and 124
Methods and processes of forming clay, with an emphasis on hand building and basic wheel work. Surface enrichment with be studied through utilization of various glazes and colorants. 4 credits.

201 Ceramics II
Prerequisite: ART-112
Continuation of ceramics sequence. Emphasis on wheel throwing. Vessel design, aesthetics, and function are stressed in constructing forms including in-depth exploration of surface treatment, glazing, decorating and firing. 4 credits.

202 Book Arts
GER: VP (Visual and Performing Arts)
Prerequisite: ART-113 and 125
Exploring book arts as a form of creative expression. Study of traditional and nontraditional binding methods will enable students to develop new skills and to adapt them into a personal statement. 4 credits.

204 Painting II
Prerequisite: ART-113 and 124
Continued study of compositional and color ideas with an emphasis on thematic painting problems such as color and light. Work from direct observation, including that of the human form. Emphasis will be placed on abstract concepts and the development of personal idiom and imagery. 4 credits.

205 Photography I
GER: VP (Visual and Performing Arts)
Prerequisite: ART-111
Introduction to black-and-white photography and photo history. Technical components include camera operation, film processing, and darkroom printing. 4 credits.

206 Photography II
Prerequisite: ART-205
Continuation of photography sequence with an introduction color photography and digital imaging. Emphasis on visual communication through print quality, sequencing, camera, and presentation format. 4 credits.

207 Printmaking I
Prerequisite: ART-111 or 124
Introduction to screen, etching and block printing materials and techniques incorporating design, color, drawing and computer software. Problems in composition with emphasis on skills and approaches pertinent to the mediums. 4 credits.

210 Sculpture II
Prerequisite: ART-112
Continuation of sculpture sequence with emphasis on variety of sculptural processes, including modeling, carving and casting. 4 credits.

215 Study Away Photography
GER: VP (Visual and Performing Arts)
Introduction to photography with emphasis on photojournalism. Technical issues such as composition, camera controls, history and ethics of documentary photography will be discussed. Assignments introduce working methods in the field, and post-production printing in the digital lab. 4 credits.

221 Graphic Design II
Prerequisite: ART-111
Study and exploration of graphic design as a creative and problem-solving tool of visual communication; translation of ideas and concepts into comprehensible visual language. 4 credits.

225 Digital Illustration
Prerequisite: ART-113 and 125
An opportunity to revisit existing visual issues of drawing while opening up new possibilities for expression. Covers the tools and techniques that Photoshop offers for digital illustration. Teaching students comprehensive knowledge of digital brushes, and layer settings, as well as print advertising/publishing industry standards for creative problem solving. 4 credits.

230 Arts of the Ancient World I: Egypt, Near East, Greece
Prerequisite: ART-130 and 131
Survey of the art and architecture of ancient Egypt from the Predynastic Period through the New Kingdom. The Minoan and Cycladic cultures, ancient Mesopotamia, and ancient Greece from the Mycenaean era through the Hellenistic era. 4 credits.

231 Arts of the Ancient World II: Etruscans and Rome
Prerequisite: ART-130 and 131
Survey of the art and architecture of the ancient Etruscans and of Rome from the Republic through the Late Empire. 4 credits.

234 Early Christian and Byzantine Art
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
Study of Christian art and architecture c. 100 - c. 500 A.D. in the lands of the western Roman Empire and of the art and architecture of the Byzantine Empire until its fall in 1453. Style, iconography and cultural context will be considered. 4 credits.
235 Arts of Western Europe in the Middle Ages
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
Study of art and architecture in Western Europe from c. 500 A.D. until the end of the Middle Ages. 4 credits.

236 Renaissance Art
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
Study of art and architecture in Italy from c. 1300 to c. 1590 and art and architecture in Northern Europe from c. 1400 - 1500. Style, iconography, and cultural context considered. 4 credits.

237 Arts of Baroque & Rococo
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
Art and architecture of the 17th and early 18th centuries in Western Europe. 4 credits.

240 Art Education for Elementary School Teachers
Prerequisite: EDU-120 or PSY-201. Enrollment limited to junior and senior education majors.
Introduction to art education and a child’s development in art. Emphasis on a variety of hands-on processes with appropriate teaching methods. Does not contribute to the art major. 4 credits.

250 Modern Art, 1800-1960
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
Art and architecture from 1800-1960 in Western Europe and America. 4 credits.

251 Contemporary Art, 1960-Present
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
This survey covers major figures and developments in visual arts from the Postmodern era, circa 1960, to the present. 4 credits.

252 Women in the Arts
GER: VP (Visual and Performing Arts)
Prerequisite: ART-130 and 131
Historical survey that examines the role of women in Western art as art producers and consumers of art and how women have been represented (by both female and male artists). It will investigate the historical, cultural and social circumstances, and representations that helped to form their work and its reception. 4 credits.

254 History of Photography
Overview of the medium of photography from its inception in 1826 to present. Tracing photography’s path from scientific innovation, to its current status as art object and object of persuasion in contemporary society, we will analyze how style and subject matter reflect the social movements and cultural values of the 19th and 20th century. 4 credits.

260 Art of Pre-Colombian Societies
GER: WC (World Cultures)
Prerequisite: ART-130 and 131
Survey of art and architecture of Pre-Columbian societies in Mesoamerica and South America. Consideration of style, iconography and aesthetics and of the functions of art and architecture within each culture. 4 credits.

261 Arts of African Societies
GER: VP (Visual and Performing Arts) and WC (World Cultures)
A survey of the arts of African societies across the continent, with emphasis on traditional arts. 4 credits.

263 Arts of Japan
GER: VP (Visual and Performing Arts) and WC (World Cultures)
Prerequisite: ART-130 and 131
Survey of Japanese art history from archaeology through 20th century with emphasis on the evolution of style in the context of religious, social and political change. 4 credits.

300 Ceramics and Sculpture III
Prerequisite: ART-200, 201 and 210
Continuation of ceramics and sculpture study. Advanced and complex problems in three-dimensional media including further development of methods and techniques used in developing a personal statement in student artwork. 4 credits.

301 Life Studies
Prerequisite: ART-125
Advanced work from the human figure in drawing, painting and/or sculpture. Emphasis on skills and techniques to facilitate personal expression. Complex visual problems using the figure as model will be a primary focus. 4 credits.

302 Painting III
Prerequisite: ART-204
Structured and independent work in painting media. Exposure to contemporary concepts and issues to stimulate advanced painting problems, varying techniques and use of media. Investigation of new and/or mixed media encouraged. 4 credits.

303 Photography III
Prerequisite: ART-206
Semester-long photo project focusing on the development of a visual narrative. Students identify and research a project, and create a cohesive body of photographs that form a comprehensive picture story. 4 credits.
320 Advertising Design  
Prerequisite: ART-220  
Focus on the organizational and creative aspects of graphic design relating to visual identity, product branding and campaigns. 4 credits.

321 Graphic Design III  
Prerequisite: ART-221  
Capstone course in graphic design sequence. Business of the visual communication; market strategies, proposals, budgets, contracts, production, planning, development, presentation, organization and practices of integrated design are explored. 4 credits.

322 Typography  
Prerequisite: ART-111  
Introduction to fundamentals of typography and typesetting; historical overview of typography with projects, readings, presentations. 4 credits.

330 Art Theory and Criticism  
Prerequisite: at least two upper-level art history courses  
Introduction to the history of art theory from ancient Greece to the present. The principles and practices of art criticism, with exercises in analytical and critical writing. 4 credits.

401 Studio Seminar  
Prerequisite: ART-113, 124, 130, and 201, 204, 206, 210 or 221  
The interpretation and criticism of contemporary art, with particular attention paid to the impact of social and political events on the visual arts. Students will identify a theme or idea within their media that will serve as the basis for the work presented in their senior exhibition. 4 credits.

501 Independent Study  
Investigation of a topic not duplicated among regular course offerings. Variable credit.

503 Individualized Internship  
Provides students the opportunity to work with an art-related business or organization under supervision of a faculty sponsor. The student develops guidelines and creates specific written objectives for the internship. At the conclusion of the internship the student produces a written journal and gives an oral summary to the faculty sponsor. Variable credit.

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### Asian Studies

Professors: S. Britt, Kaup, Khandke, Yagi (Chair)  
Associate Professors: L.I. Knight, Kuoshu, Nair  
Assistant Professors: Baba, Blumenfield, L. Harris, Matsumura, Schmidt-Hori, Zhang  
Lecturers: Tokunaga, Yazijian  

The department offers a broad interdisciplinary major in Asian Studies and more focused studies with majors in Chinese Studies and Japanese Studies.

Students majoring in Asian Studies must complete ten courses, including:

- AST-300,
- at least three courses in a single Asian language at Furman or three non-language Asian Studies courses,
- at least five other foundations or advanced courses from two or more academic disciplines, and
- AST-470.

The foundations or advanced courses contributing to the major requirements may not all focus on a single country.

#### Language Courses

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<tr>
<th>Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>CHN-110</td>
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<td>CHN-120</td>
<td>Elementary Chinese II</td>
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<td>CHN-201</td>
<td>Intermediate Chinese I</td>
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Foundations in Asian Studies

ANT-204 Modern Japanese Society through Films
ANT-205 Japanese Popular Culture
ANT-209 Gender in East Asia
ANT-210 Anthropology of China
ART-263 Arts of Japan
AST-211 Media in Asia
AST-220 Ramayana
AST-221 South Asian Music and Popular Culture
AST-225 Premodern Literature of India
AST-250 Human Development in Asia
AST-255 Poverty, Gender & Development in India
AST-260 Environment and Health in India
CHN-220 Survey of Chinese Culture
CHN-225 Chinese Film
CHN-230 Survey of Chinese Literature
CHN-235 Classic Chinese Fiction
CHN-245 Twentieth Century Chinese Literature
CHN-246 Twentieth Century Chinese Popular Fiction
HST-155 Ancient and Early South Asia
HST-156 Modern South Asia
HST-161 Ancient and Early Japan
HST-162 Modern Japan
HST-165 Ancient and Imperial China
HST-166 Modern China
JPN-225 Japanese Cinema
JPN-235 Classical Japanese Literature
JPN-245 Modern Japanese Literature
LNG-260 Languages of Asia
PHL-220 Realizing Bodymind
PHL-230 Indian Philosophy
PHL-240 Chinese Philosophy
PHL-241 Confucian Philosophy
PHL-250 Japanese Philosophy
PSC-226 Politics of China
PSC-229 Politics of Asia
PSC-243 Issues in Chinese Politics
REL-223 Hindu Cultures and Religious Worlds
REL-224 Introduction to Buddhism
REL-227 Religions of South Asia

Advanced Course Offerings

CHN-320 Travel Study in Chinese Culture
ECN-243 Economic Growth and Development
ECN-249 Asian Economics
ECN-251 Economics of China
ENG-369 Gender in South Asian Literature and Film
ENG-471 South Asian Culture Studies
HST-256 Gender History of South Asia
HST-262 Japanese Social Movements During the Cold War
HST-350 Travel Study in China
HST-355 Travel Study in India
REL-325 Women and Power in Hinduism
REL-327 East Asia Buddhism: The Way of the Bodhisattva

Students majoring in Chinese Studies must complete at least eight courses, including:

• CHN-202, CHN-301 and CHN-302,
• at least four more courses focusing on China which include: ANT-210, AST-470, CHN-220, 225, 230, 235, 245, 246, 320, ECN-251, HST-165, 166, 268, 350, PHL-240, 241, PSC-226, 243 or a first year seminar with a topical focus on China, and
• CHN-470.

Two courses contributing to the major requirements must have a prefix other than CHN.

Students majoring in Japanese Studies must complete at least eight courses, including:

• JPN-202, JPN-301 and JPN-302,
• at least four more courses focusing on Japan which include: ANT-204, 205, AST-470, HST-161, 162, 262, JPN-225, 235, 245, PHL-220, 250, or a first year seminar with a topical focus on Japan, and
• JPN-470.

Two courses contributing to the major requirements must have a prefix other than JPN.

Asian Studies (AST) Courses

150 China in Search of Sustainability
Examining the social and environmental impacts of China’s “Go West Campaign” launched in 2000. Exploring how the strategy was developed, and how it has exacerbated, rather than relieved, many social schisms as well as contributed to massive environmental concerns. Taught in China, starting in the developed financial capital of Shanghai, visiting the remote minority province Guizhou, and concluding in Beijing. 2 credits. May Experience ONLY.

211 Media in Asia

GER: VP (Visual and Performing Arts) and WC (World Cultures)
Media, primarily from and about South Korea, Japan, China, and India, to examine globalizing and local images, texts and sounds including the examination of news media coverage, flows of media forms like Japanese manga and Hong Kong martial arts, and interpretations of Asian media forms in the United States and throughout the world. Students will learn how to interpret and analyze visual images. 4 credits.
220  Ramayana  
GER: UQ (Ultimate Questions) and WC (World Cultures)  
Examination of various versions (text, film, television, etc.) of the Indian epic Ramayana with the intention of addressing the profound and long lasting influence this narrative has had on the religion, morals, culture, politics, and society of South and Southeast Asia. 4 credits.

221 South Asian Music and Popular Culture  
GER: WC (World Cultures)  
An introduction to the greatly diverse popular cultures of South Asia, including music, film, and art. Through listening, selected readings, films, and discussion, issues of religion, gender, politics, ethnic and regional identity, cultural property, globalization, and the effect of mass media on South Asian popular culture will be addressed. 4 credits.

225 Premodern Literature of India  
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)  
Examination of several genres of literature of premodern India, including epics such as the Mahabharata and Ramayana, Sanskrit classical works, and vernacular Bhakti and Sufi poetry. Religious themes will also be addressed while engaging with literary theory and criticism as practiced during these time periods. 4 credits.

250 Human Development in Asia  
Examination of the recent rise of Asia while considering the uneven growth and development across Asia including the challenges of poverty, gender inequality, human rights, energy security and environmental degradation in the most populous region of the world. 4 credits.

255 Poverty, Gender and Development in India  
Examining the effects of poverty on Human Development Indicators such as health, nutrition, education and the environment. Since poverty disproportionally has a greater impact on women’s lives, we will examine gender inequities, adverse sex ratios, violence against women, and the considerable social, political, economic health and legal challenges women face in India. Existing policies and programs will be evaluated in keeping with India’s progress towards the UN mandated Millenium Development Goals. 4 credits.

260 Poverty, Gender and Development in India  
Examining the effects of poverty on Human Development Indicators such as health, nutrition, education and the environment. Since poverty disproportionally has a greater impact on women’s lives, we will examine gender inequities, adverse sex ratios, violence against women, and the considerable social, political, economic health and legal challenges women face in India. Existing policies and programs will be evaluated in keeping with India’s progress towards the UN mandated Millenium Development Goals. 4 credits.

270 Languages of Asia  
GER: HB (Empirical Studies of Human Behavior) and WC (World Cultures)  
A linguistic introduction to the languages of China, India, and Japan emphasizing the structure of the languages, the divergent writing systems, lexical borrowing and development, language policy, and sociocultural considerations such as class and gender distinctions as well as honorifics. 4 credits.

300 Colloquium  
The course allows majors to investigate “Asia” as a conceptual and geopolitical space and to critically investigate the discipline. Thus, majors will be well poised to continue with upper-level courses across the geographic and disciplinary distributions. 2 credits.

470 Seminar in Asian Studies  
4 credits.

504 Directed Independent Study  
4 credits.
Biology

Professors: Blaker, Haney (Chair), Liao, Pollard, Thompson, Turgeon, Worthen
Associate Professors: Hestermann, Hollis, Lewis, Perry
Assistant Professors: Chosed, Rawlings, Roark, Quinn
Adjunct: Foltz, Schammel

Biology offers majors leading to both the Bachelor of Science (B.S.) and the Bachelor of Arts (B.A.) degree. The Bachelor of Science is recommended for students planning to enter graduate or professional school in the life and health sciences. The Bachelor of Arts provides greater flexibility for students pursuing broader or more interdisciplinary objectives.

As outlined below, students who plan to receive the B.S. degree with a major in biology must complete 10 or more biology courses, each of which must be at least three credits. They must also complete three chemistry courses:

- BIO-111, 221, and 222,
- BIO-502 or 503 with BIO-075,
- at least one course from each of the following three groups:
  - Group I (Molecular and Cellular Biology): BIO-300 or 303.
  - Group II (Physiology): BIO-320, 321 or 322.
- at least three other courses in biology numbered 200 or higher, and
- CHM-110, 120, and 115 or 220.

As outlined below, students who plan to receive the B.A. degree with a major in biology must complete 10 or more biology courses, each of which must be at least three credits.

- BIO-111,
- BIO-501, 502, or 503 with BIO-075, and
- at least eight other courses in biology numbered 200 or higher.

Majors whose career preparations require successful completion of science or mathematics courses outside of biology may, with approval of the chair, substitute one course from those areas for certain biology courses, while two 2-credit biology May Experience courses numbered 200 or higher can be used to fulfill one of the elective course requirements for either the B.A. or B.S. degrees.

Students planning to teach biology in secondary schools must complete a major in biology to be certified. These students must also successfully complete EDU-111, 120, 221, 350, 454 (or equivalent in the major department), 460, 472, EDEP-670, CHM-110, 115 and 120, PHY-111 or 104, and one course from: PHY-105, EES-110 or 111, in addition to the prescribed courses in the major. The requirements for certification (teaching internship) will be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

BIO-101 or 102 is recommended for non-majors who may want to become certified to teach. Non-biology majors applying to health professional schools that require eight credits of general biology are recommended to enroll in BIO-111 and 221.

Students preparing for professional and graduate schools should be careful to meet those schools’ entrance requirements, which may include some courses not required for the degree. All biology majors are urged to take a standardized examination such as the Graduate Record Examination (Biology Subject Test) or the Medical College Admission Test.

Dual-degree programs in Environmental Management, Medicine, Dentistry, Nursing, and other health fields allow a student to enter a
Biology (BIO) Courses

075 Seminar in Biology
Prerequisite: permission of instructor
Presentations of current topics in biology by students, faculty, and visiting scientists. Emphasis is on effective oral communication and critical examination of scientific information and ideas. 0 credits.

101 Principles of Biology
GER: NWL (Empirical Study of the Natural World with laboratory)
The basic principles common to living organisms, including: cell and molecular biology, genetics, organismal physiology, ecology, evolution. Designed for non-science majors. Students may receive credit for either BIO-101 or BIO-102, not both, and neither may be enrolled after successful completion of BIO-111. 4 credits.

102 Biology and the Environment
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)
The basic principles common to living organisms, with emphasis on environmental biology. Designed for non-science majors. Topics include: ecology, evolution, biodiversity, and environmental issues, plus a synopsis of cellular biology, genetics, and physiology. Students may receive credit for either BIO-101 or BIO-102, not both, and neither may be enrolled after successful completion of BIO-111. 4 credits.

111 Foundations of Biology
GER: NWL (Empirical Study of the Natural World with laboratory)
Introduction to the unifying concepts of biology. Topics include: cell structure and function, metabolism, genetics, evolution, and the diversity of life. Laboratories emphasize an investigative approach. Designed for science majors. 4 credits.

140 The War on Cancer
An introduction of the basic biology of cancer and its various origins. An examination of how cancer can be prevented, diagnosed and treated. Intended to be accessible to all students regardless of science background. May Experience ONLY. 2 credits.

150 To Live and Let Dye
An introduction to natural plant dyes. History of plant dyes, their usage and importance in culture along with the biology of pigments, fibers, and mordents as they interact to give a brilliant pallet of color. Exploration of plant dyes through investigative skills and personal creativity. May Experience ONLY. 2 credits.

221 Genetics
Prerequisite: BIO-111 or 101
Introduction to the study of inheritance. Topics include: transmission of genes in cellular and organismal reproduction, structure and arrangement of genetic material in the cell, control and function of genes, and population genetics. Equal emphasis given to inheritance patterns and molecular genetics. Laboratories include testing the genetics of Drosophila and other organisms, and basic molecular techniques. 4 credits.

222 Research and Analysis
Prerequisite: any biology course enrolled at Furman
Introduction to purposes and methods of scientific inquiry. Topics include: philosophy of science, research design, use of biological literature sources, fundamental laboratory techniques, statistical analysis, and survey of careers in biology. Laboratory includes designing, performing, and reporting on research projects. 4 credits.

240 Regional Agricultural Science
Prerequisite: instructor permission
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)
Travel study course examining the ways in which people in different parts of the world grow their food. The primary focus is the interactions among scientific principles, local environments, and local cultures in determining the methods employed. Foodstuffs studied will vary in each offering. 4 credits.

250 Darwin and the Galápagos
Prerequisite: instructor permission
An introduction to Darwin and evolution, including a trip to Ecuador and the Galapagos Archipelago. Pre-trip lectures on Darwin’s seminal contributions to evolutionary biology will create the foundation for observations made on a cruise in the Galapagos. Also includes tours of colonial Quito and the Otavalo region exposing students to the cultural history, diversity, and vibrancy of Ecuador. May Experience ONLY. 2 credits.
251 Introduction to Ethnobotany
Prerequisite: instructor permission
Examination of how people use indigenous plants. Plant use as food, shelter, medicine, clothing, and in ceremony will be explored. An intensive lecture format on campus will be followed by a field experience in places such as the Amazon Rainforest, Ecuador, Peru, or Costa Rica. No knowledge of botany is presupposed. May Experience ONLY. 2 credits.

252 Oceans and Human Health
Prerequisite: instructor permission
Travel-study in Bermuda. Study of ocean processes affecting human health and the contribution of marine organisms to medicine and research. Lectures, labs and fieldwork emphasize risks and benefits of our interactions with the ocean, and related research technologies. May Experience ONLY. 2 credits.

255 Insect Diversity
Prerequisite: BIO-101, 102, or 111
Field-based survey of the major groups of insects. Lecture will focus on the evolutionary history, ecology, and taxonomy of insects. The primary component will be collection, identification, and preservation of insect specimens, contributing to the “all taxa biological surveys” on campus and at the Furman Forest. May Experience ONLY. 2 credits.

260 Introduction to Biomaterials
Prerequisite: BIO-111
An exploration of ideas in cardiovascular, orthopedic, and regenerative medicine and how today’s technologies and medical innovations have changed these medicines. Course activities will involve trips to local research and medical facilities & hands-on manipulations of biomaterials and devices. May Experience ONLY. 2 credits.

302 Molecular Genetics
Prerequisite: BIO-221 and 222
Study of molecular genetics within living cells and viruses. Topics include: DNA replication, gene regulation and expression, and artificial manipulation of genes. Laboratory includes various techniques used in molecular genetics, such as isolating and cloning genes. 4 credits.

303 Biochemistry of the Cell
Prerequisite: BIO-222 and CHM-120
Study of the structure and function of biomolecules in the context of the cell. Topics include: the major biosynthetic and catabolic pathways in the cell and their regulation, protein function, structure, modifications and degradation, enzyme kinetics and selected biochemical techniques. Laboratory work involves current biochemical methods such as protein purification from various types of cells and subsequent enzymatic characterization. 4 credits.

308 Molecular Biotechniques
Prerequisite: BIO-221
Brief history of modern molecular biology, the basic concepts of techniques commonly used in molecular biology, and the current ethical issues in the application of biotechniques. Hands-on experience and critical reading of research articles. May Experience ONLY. 2 credits.

320 Animal Physiology
Prerequisite: BIO-222
Comparative and environmental animal physiology. Organ systems studied in invertebrate and vertebrate organisms, with emphasis on physiological adaptation. Laboratory topics include metabolism, respiration, osmoregulation, stress physiology. 4 credits.

321 Plant Physiology
Prerequisite: BIO-222
Comprehensive exploration of plant physiology, with topics emphasizing photosynthesis and respiration, plant water relations, organic and mineral nutrition, secondary metabolites, xylem and phloem transport, growth/development, and stress physiology. Laboratory exercises have extensive investigative components with open-ended activities. 4 credits.

322 Human Physiology
Prerequisite: BIO-111
Molecular and cellular biology in first several sessions, followed by survey of the functions of the various organ systems in the human body. Laboratory involves studies of humans, using computerized data acquisition systems. 4 credits.

340 Ecology
GER: NE (Humans and the Natural Environment)
Prerequisite: BIO-222
The interactions between organisms and their environments, and the consequences of these interactions for population dynamics, community structure, and the flow of energy
and matter through ecosystems. Also, consideration of environmental issues and conservation. Laboratories include local field work, experiments, and possibly one or two overnight/weekend field trips. 4 credits.

341 Tropical Ecology  
Prerequisite: BIO-101, 102 or 111 and permission of instructor  
The composition, structure, and function of tropical ecosystems, communities, and populations. Laboratories focus on ecological sampling methods. 2 credits.

342 Field Studies in Tropical Ecology  
Prerequisite: BIO-341  
Students visit a variety of habitats including tropical rain forests, tropical dry forests, and cloud forests in Costa Rica. Intensive study of natural history will be combined with original ecological investigations and preparation of research papers. May Experience ONLY. 2 credits.

343 Environmental Systems  
GER: NE (Humans and the Natural Environment)  
Prerequisite: BIO-111, CHM-110, EES-110, 111, 112 or 113.  
Same as EES-343. Interdisciplinary examination of the physical, biological and chemical processes that control the flow of matter and energy in surface environments on planet Earth. Emphasis on the interactions between abiotic and biotic processes. Lab includes field studies and weekend field trips. 4 credits.

344 African Ecology  
GER: NW (Empirical Study of the Natural World) and NE (Humans and the Natural Environment)  
Prerequisite: any biology course and permission of instructor  
Travel study course taught in South Africa that demonstrating ecological principles and examining conservation issues. Focus on the ecology of the region’s unique flora and fauna as well as the conservation challenges of South Africa’s cultural, political and economic situation. 4 credits.

350 Infectious Disease Ecology  
Prerequisite: BIO-221  
The impacts of ecosystem changes on emerging and reemerging infectious diseases in animals and plants (both domestic and wild) and how these diseases influence communities, ecosystems, and human welfare. Laboratories include field and lab work. May Experience ONLY. 2 credits.

360 Infectious Diseases in Movies: Fact or Fiction  
Prerequisite: BIO-221  
A study of the microbiology, immunology, and epidemiology behind infectious diseases and their portrayal in films, including comparisons of some old and new horror and science fiction movies to examine changes in scientific knowledge and discussions of fear, stigma, and morality in society. May Experience ONLY. 2 credits.

365 Genetic Disorders of Superheroes  
Prerequisite: BIO-221  
A study of the molecular and genomic bases of human genetic disorders and their causes by using the characteristics of fictional superheroes as examples. The social, legal, and ethical issues related to disease diagnosis and treatments and human biotechnology will also be discussed. May Experience ONLY. 2 credits.

400 Field Botany  
Prerequisite: BIO-101, 102 or 111  
Natural relationships of vascular plants, practice in the use of identification keys, experience in recognizing species in the field, techniques used in collecting and preparing herbarium specimens, and exposure to pertinent literature. Laboratories include field trips. 4 credits.

401 Applied Plant Science  
GER: NE (Humans and the Natural Environment)  
Prerequisite: BIO-101, 102 or 111  
Introduction to plant biology as it pertains to human society. Topics include: life cycles, structure/function relationships, and uses of plants in society. Emphasis on medicinally and economically important plants. Lab exercises reflect the importance of plants as sources of food, fiber, and medicine. 4 credits.

402 Ethnobiology  
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)  
Prerequisite: BIO-101, 102 or 111  
Travel study course focusing on the study of interrelations between humans, plants, animals, and their environment. A key component is understanding the past, present, and future importance of biodiversity and of change in these interrelations. 4 credits.

420 Comparative Anatomy & Embryology  
Prerequisite: BIO-111  
Lecture and laboratory comparative study of the embryology and adult anatomy of representative chordates. Laboratory dissections include the dogfish shark and the cat. 4 credits.

421 Invertebrate Zoology  
Prerequisite: BIO-222  
Survey of the major and minor phyla, with an emphasis on arthropods (arthchnids, crustaceans and insects). Includes the taxonomy, ecology, behavior and physiology of representative organisms. Laboratories include field trips, specimen collection and preservation, and dissection. 4 credits.
422 Field Zoology
Prerequisite: BIO-222
Taxonomic techniques, natural history and phylogenetic relationships of vertebrates. Emphasis on mammals, reptiles and amphibians. Frequent laboratories and field trips (including at least one overnight) to observe, identify and collect animals. 4 credits.

423 Marine Biology
GER: NW (Empirical Study of the Natural World) and NE (Humans and the Natural Environment)
Prerequisite: any BIO course and permission of instructor
Travel study course focusing on biodiversity, ecology and physiology of marine organisms, especially as they relate to organismal adaptations to the environment. Includes examination of the influences of humans on the marine environment. 4 credits.

424 Biology of the Andes & Galápagos
Prerequisite: instructor permission
Ecology of the Andes Mountains. Emphasis on the unique flora and fauna endemic to this region. Ecological and behavioral studies in the Galápagos Islands as viewed from an evolutionary prospective. Taught in South America. 4 credits.

425 Developmental Biology
Prerequisite: BIO-221 and 222
Embryonic changes studied at the genetic, biochemical, cellular, and spatial levels. Growth, metamorphosis, tumors, and aging are also studied. Emphasis is on mechanisms of developmental processes, rather than on anatomy. Laboratory involves modern techniques used in the study of development, handling, and manipulating living embryos of several species. 4 credits.

426 Human Anatomical Systems
Prerequisite: BIO-222. CHM-120 and PHY-111 recommended.
A thorough study of the human body and its complexity. Application of this knowledge will be used in embryological, histological, and cadaver-based studies. Special emphasis is placed on functional anatomy of the body, through an understanding of embryology and pathology. Critical thinking skills will be developed using scenarios that involve the integration of knowledge from the fields of biology, chemistry, and physics. A student cannot receive credit for this course and either HSC-210 or HSC-211. 4 credits.

430 Conservation Biology
Prerequisite: BIO-222
An overview of all modes of living natural resource management from the strictly utilitarian use of fisheries and wildlife, through endangered species conservation, the preservation of biodiversity, and adaptive management at the ecosystem level. The course also includes a review of U.S. environmental treaties, law, policy, and the environmental movement since 1900. Two overnight field trips to view conservation biology in action. 4 credits.

432 Field Studies in Biology
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)
Prerequisite: permission of instructor. BIO-340 or 341 recommended.
Travel study course focusing on floral and faunal compositions and analysis of species interactions in a variety of habitats and ecological communities not found in South Carolina. Usually involves camping, hiking and travel by water in areas such as New England, Rocky Mountains, desert Southwest, Everglades or foreign countries. Variable credit.

440 Population Genetics and Evolution
Prerequisite: BIO-221 and 222
Evolutionary mechanisms that change the genetic structure of populations. Patterns of evolutionary change documented by the fossil record, biogeography, comparative anatomy and genetic similarity. Labs include experiments in Drosophila evolution, computer simulations, and at least one field trip (fossils). 4 credits.

442 Human Genetics
Prerequisite: BIO-221
A study of the molecular, cellular, physiological and population bases of human genetic disorders. Additional topics include techniques, pedigrees, risk assessment and ethics. Laboratory exercises include techniques in cytogenetics and molecular genetics, case studies and discussions. 4 credits.

444 Pharmacology and Toxicology
Prerequisite: BIO-221 and CHM-120
The action of drugs and toxic compounds in the body. Broad physiological principles of absorption, distribution, metabolism, elimination and mechanisms of action will be emphasized. Laboratory sessions will include techniques for drug and toxicity testing. 4 credits.

445 Genomics and Bioinformatics
Prerequisite: BIO-221
Comparative genomics, information retrieval from biological databases, amino acid and DNA sequence analysis, similarity searching, phylogenetic reconstruction, models of evolution, genome remodeling, and molecular visualization. Lecture and laboratory incorporate computer-based exercises and student research projects. Separate laboratory component. 4 credits.

450 Microanatomy
Prerequisite: BIO-222
Extensive examination of the structural properties of animal tissues, with emphasis on human samples. Identifying
cells and organs based on microscopic structural attributes. Laboratory includes histological preparation and the identification of unknown samples. 4 credits.

455 Neurochemistry
Prerequisite: CHM 120 and BIO-222 or CHM 240 or PSY 202
Nervous system function at the biochemical level. Introduction to biochemical principles, followed by the study of neuronal cytoskeleton, myelin, ion channels, neurotransmitters, and selected neurological disorders. Labs analyze myelin, receptors, and neurotransmitters. 4 credits

460 Neurobiology
Prerequisite: BIO-222 or PSY-202
Structure, function and interactions of neurons and supportive cells of the nervous system. Analysis of simple neuronal circuits and neuronal alterations in development, memory and neurological disorders. Laboratories include the study of nervous system cells in culture and groups of neurons in the rat. 4 credits.

461 Teaching Methods and Materials in Biology
Prerequisite: EDU-464
Practicum for developing teaching skills in biology, including the laboratory and field work. Topics include planning and preparation, safety and storage, and instruction. Practicum will provide experiences teaching in the university classroom. Variable credit.

470 Immunology
Prerequisite: BIO-222
Study of the immune system dealing with both adaptive and innate immunity. Topics include cellular aspects of immunology, antibody-antigen interactions, the genetic basis of antigenic recognition, regulation of the immune response, tumor immunology and autoimmunity. Laboratory emphasis on various modern techniques used in immunology. 4 credits.

475 Nutrition
Prerequisite: BIO-221 and 222
Composition, chemistry, digestion, absorption, and metabolism of foods. Other topics include energy balance, food additives, food sensitivities, and the role of diet in development and disease. The animal nutrition topics meet the needs of pre-veterinary students. 4 credits.

501 Independent Study
Prerequisite: permission of instructor. BIO-222 recommended. Variable credit.

502 Research
Prerequisite: BIO-222 and permission of instructor
A project involving original and relatively independent research. Working with a faculty sponsor, the student poses a question of biological significance, writes an agreement specifying work expectations, devises the experimental protocol, and collects data to evaluate the question. Laboratory or field projects may be performed either on campus or at other locations. A research paper and oral presentation of the topic are required upon completion of the project, with the oral presentation usually done in the context of BIO-075. Variable credit.

503 Individualized Internship
Prerequisite: permission of instructor. BIO-222 recommended.
Provides direct training and work experience in one or more aspects of the biological sciences at an off campus facility. Working with a faculty sponsor and an on-site supervisor, students develop objectives for the internship/preceptorship experience, write an agreement specifying what is expected, and keep a detailed log of their activities. 0 credit.

505 Health Careers Internship
Prerequisite: permission of instructor
First-hand experience in health care. Prior to placement, each student will produce a curriculum vitae and will undergo training regarding HIPAA (the Health Insurance Portability and Accountability Act), including completion of the certification exam. After general initial observations the internship will be tailored to meet the student’s specific career goals. May not contribute to the biology major. 0 credit.
Business and Accounting

Professors: Karwan, M. Pierce, Summers (Chair)
Associate Professors: Clemens, Roberson, Smythe, Underwood
Assistant Professors: McHugh, Player, Stratton
Adjunct: S. Anderson, Batchelor, Merkt

The department offers majors in business administration and accounting. Except for required courses that are identical, courses used to satisfy one of these majors may not be used to satisfy the other.

Business Administration Major

To graduate with a major in business administration, a student must have at least a 2.00 grade point average for courses used to satisfy the major requirements, excluding MTH-141 or 150.

A major must include:
- ACC-111 and 301,
- BUS-320, 330, 340 and 450,
- ECN-111 and 225,
- MTH-141 or 150, and
- at least four more courses numbered 230 or greater in ACC, BUS (excluding 503), or ECN (excluding 503).

Business Block: During the junior year, either fall or spring semester, newly declared majors will apply to enroll in four courses integrated into a single block: ACC-301, BUS-321, 331 and 341. ACC-111, ECN-111, 225 and MTH-141 or 150 must all be successfully completed prior to application for the block.

Accounting Major

To graduate with a major in accounting, a student must have at least a 2.00 grade point average for courses used to satisfy the major requirements, excluding MTH-141 or 150.

A major must include:
- ACC-111, 311, 312, 320, 330, 340, and 370,
- BUS-340,
- ECN-111 and 225,
- MTH-141 or 150, and
- at least two more course numbered 230 or greater in ACC, BUS (excluding 503), or ECN (excluding 503).

Most states require Certified Public Accountant (CPA) candidates to complete 150 credits of undergraduate or graduate course work, including specified study in business and accounting. Students interested in becoming a CPA should consult a faculty member in accounting to design a program of study.

Accounting (ACC) Courses

111 Principles of Financial Accounting
Theory and practice of accounting as applied to the corporate form of business organization. Analysis of business transactions, valuation of assets and liabilities, determination of income, and preparation and interpretation of financial statements. 4 credits.

301 Principles of Managerial Accounting
Prerequisite: ACC-111
The use of accounting information by management in planning, control and decision-making in business enterprises. Topics include production decisions, activity-based costing, budgeting and standards, and capital investment decisions. Available only via the Business Block. 4 credits.

311 Intermediate Financial Accounting I
Prerequisite: ACC-111
In-depth study of financial accounting standards, the accounting process, and problems related to presenting income statements and balance sheets for business enterprises. Consideration of working capital accounts, non-current assets, non-current liabilities, and related income statement accounts. A significant service learning project is a required component of this course. 4 credits.

312 Intermediate Financial Accounting II
Prerequisite: ACC-311
In-depth study of financial accounting standards and problems related to presenting an enterprise’s balance sheet, income statement and statement of cash flows. Topics include investments, stockholders’ equity, dilutive securities, tax allocation, pensions, leases and revenue recognition. 4 credits.
320  Cost Accounting  
Prerequisite: ACC-311  
Collection and utilization of cost data by management for short-term planning and control purposes. Topics include cost-volume-profit relationships, product-costing methods, flexible budgets, standard cost variances and cost allocations. 4 credits.

330  Auditing  
Prerequisite: ACC-312  
Theory integrated with procedures for gathering evidential matter to provide a basis for the auditor’s report on the financial statements of business enterprises. Review of standards, ethics, planning, internal control, procedures and reports. 4 credits.

340  Federal Income Taxation  
Prerequisite: ACC-111. ACC-312 recommended.  
Current federal income tax law pertaining to individuals, partnerships and corporations. Focus on compliance matters with supplementary study in tax planning and research fundamentals. 4 credits.

350  Accounting Information Systems  
Prerequisite: ACC-111  
Examining and analysis accounting systems utilizing transaction processing cycles and accounting-based information technology (IT) including e-commerce, electronic data processing, and continuous auditing. The design, development, implementation, and auditing of accounting-based information systems. 4 credits.

360  International Accounting  
Prerequisite: ACC-312  
Focus on the accounting issues encountered by multinational companies engaged in international trade and invested in foreign operations. 4 credits.

370  Advanced Financial Accounting  
Prerequisite: ACC-312  
Study of business combinations and related consolidated financial statement issues, accounting for foreign operations, and accounting problems of partnerships. 4 credits.

450  Advanced Topics in Accounting  
Prerequisite: ACC-312  
Selected topics in the field of accounting not covered in other courses. 4 credits.

501  Independent Study  
Variable credit.

Business Administration (BUS) Courses

150  Perspectives on Business  
An introduction to the various functional areas of business (accounting, finance, marketing, operations) with emphasis on their integration. Other topics of importance, such as globalization, ethics and corporate social responsibility, and the impact of new technology, will also be addressed and examined in the context of the current business environment. In addition, the course will examine the intersection of business with various other subject areas traditionally taught in the liberal arts. 4 credits.
321 Marketing Strategy
Introduction to the field of marketing with an emphasis on strategy. Course includes detailed study of the marketing concept, including market segmentation, consumer behavior and external environments. Focus on processes of product development, pricing, distribution and promotion. Available only via Business Block. 4 credits.

330 Operations Management
Prerequisite: ECN-225, CSC-101 or 121, MTH-141 or 150
Issues associated with the manufacture of products and the delivery of services. Topics include operations strategy, quality management, product and service design, process planning, technology decisions, facility location and layout. Available only via Business Block. 4 credits.

331 Operations and Technology Management
Issues associated with the manufacture of products, technology and the delivery of services. Topics include operations strategy, quality management, product and service design, process planning, technology decision-making, facility location and layout. Available only via Business Block. 4 credits.

335 Management Information Systems
Prerequisite: CSC-101 or 121
The role of information in supporting business operations, managerial decision-making, and organizational strategy. Topics include technology concepts, inter-networked enterprises, functional area applications, systems development, and effective management of information resources. 4 credits.

337 Business Analytics
Prerequisite: MTH-141 or MTH-150
An introduction to statistical and predictive analytical tools to find patterns in data, identify relationships among operational variables and business outcomes, and to provide insight into complex decision making situations. 4 credits.

340 Introduction to Finance and Markets
Prerequisite: ACC-111, ECN-225, MTH-141 or 150
Introduction to financial markets analyzing the sources and costs of funds available as well as factors affecting their allocation. 4 credits.

341 Introduction to Corporate Finance
Goals of the firm in the context of the financial markets in which it operates. Emphasis on analyzing the sources and costs of funds available as well as factors affecting their allocation. Available only via Business Block. 4 credits.

350 Business Law
The study of law and society. Topics include the judicial system, the basic law of contracts, including offer and acceptance, consideration, form of the agreement, defenses, and breach of contract, the law of assignment and third party beneficiary contracts, and the law of agency. 4 credits.

360 Performance Management
GER: HB (Empirical Study of Human Behavior)
Introduction to fundamental principles and methods of Behavior Analysis as applied to performance improvement in organizations. Students will interview local business managers/owners, learn to pinpoint areas for performance improvement, develop measurement systems, and design and evaluate evidence-based solutions to performance-based workplace deficiencies. 4 credits.

411 Entrepreneurship and New Venture Development
Entrepreneurship in society and the characteristics of entrepreneurs and their organizations. Topics include: how opportunities are discovered, the conditions of markets and industries that must be weighed in choosing to enter them, and the resources to establish a new venture and build it into a successful enterprise. 4 credits.

420 Marketing Research
Prerequisite: BUS-320 and ECN-225
Emphasis on the importance of a marketing information system. The types and sources of information required for marketing planning and decision making. Topics include the research process, techniques, design and methodologies. Concepts applied through case studies or projects in the business community. 4 credits.

421 International Marketing
Prerequisite: BUS-320
Management of global marketing operations with emphasis on the strategic distribution, promotion, product, and pricing issues faced by firms engaged in world trade. An in-depth examination of the economic, financial, cultural and political/legal infrastructures that affect the marketing function in different countries and regions. 4 credits.

422 Integrated Marketing Communications
Prerequisite: BUS-320
Introduction to the field of advertising and promotions management from a systematic, organizational standpoint. Focus on traditional advertising, but also on other areas of marketing communication such as direct marketing, sales promotion, interactive media, publicity/public relations, sponsorship marketing, point-of-purchase communications, and personal selling. 4 credits.

430 Integrated Process Improvement
Prerequisite: BUS-330
Integration of Lean and Six Sigma methodologies to achieve process improvement by identifying, analyzing and formulating solutions to problems. Topics include: lean thinking, six sigma quality, lean and six sigma tools, process mapping, project selection, introduction to design of experiments, and team dynamics. 4 credits.
440 Investments Management
Prerequisite: ECN-111, 225 and BUS-340
Study of various investment alternatives along with the nature of the markets in which they are traded. Primary emphases on security analysis and portfolio composition as well as matching portfolios to investment objectives. 4 credits.

441 International Finance
Prerequisite: ECN-111, 225 and BUS-340
Study of international markets and the financial operations that take place in those markets. The financial aspects and operations of multinational corporations are highlighted. Topics include: exchange rate behavior and risk management, financing of international operations, and international capital budgeting. 4 credits.

442 Financial Institutions
Prerequisite: ECN-111
The nature of the funds sources and asset preferences of the major financial institutions, as well as an overview of the financial markets within which they function. Point of view is that of decision makers operating within the institutions. 4 credits.

450 Strategic Management
Prerequisite: ACC-301, BUS-320, 330 and 340
Course for seniors in business administration. The process of strategic management, including industry and competitive analysis and strategy formulation, implementation and evaluation. Knowledge from the different functional areas of business is integrated and focused on the solution of complex business problems. Oral and written communication emphasized. 4 credits.

501 Independent Study
Variable credit.

503 Individualized Internship
Individualized internships approved by a designated faculty sponsor. Students develop objectives for the internship experience, read relevant literature, prepare written assignments, and submit reflective summaries of their internship activities. Course will not count as a major elective for accounting or business administration majors. Pass-no pass only. Variable credit.

505 Structured Internship
Internships are developed by the student and approved by the faculty supervisor. Students develop objectives for the internship experience, read relevant literature, prepare written assignments, submit weekly journals and reflective summaries, and write a final paper. Student will attend meetings with the faculty supervisor. Course will not count as a major elective for accounting or business administration majors. Pass-no pass only. Variable credit.

Chemistry
Professors: Hanks, L.B. Knight (Chair), Petty, Wagenknecht, J. Wheeler, Wright
Associate Professors: Buchmueller, Goess, Springsteen
Assistant Professors: Kuklinski, Martin
Visiting Assistant Professor: Day
Visiting Instructor: Edwards
Adjunct: Banisaukas, Gordon, Posey, S. Wheeler

The chemistry program is accredited by the American Chemical Society (ACS). ACS accredited degrees are available in three tracks of study: chemistry, biochemistry and environmental chemistry. A program of study culminating in ACS undergraduate certification is required of all candidates for the Bachelor of Science (B.S.) degree with a major in chemistry. Majors must complete one of the following tracks:

Chemistry:
- CHM-075, 110, 115, 120, 220, 230, 240, 310, 330, 340 and 502,
- at least two courses from the following: CHM-410, 420, 430, 440, 450, 460, 470 or 471
- MTH-150, 151, and 160, and
- PHY-111 and 112.

Environmental Chemistry:
- CHM-075, 110, 115, 120, 220, 230, 240, 310, 330, 340 and 502,
- CHM-440,
- MTH-150, 151, and 160,
- PHY-111 and 112, and
- two courses in biology or earth and environmental sciences, approved in advance by the department.

Biochemistry:
- BIO-221,
- CHM-075, 110, 115, 120, 220, 230, 240, 310, 330, 460, 465, and 502,
- at least one more chemistry course numbered 400 or greater,
• MTH-150, 151, and another mathematics course, typically MTH-241, approved in advance by the department, and
• PHY-111 and 112

Participation in the annual summer undergraduate research program is accepted in lieu of the required CHM-501 or 502.

Each student must also write a paper based on their research or independent study and present the work to a faculty committee. Papers prepared in the summer undergraduate research program may meet this requirement. The research performed to meet the required CHM-502 requirement for the biochemistry and environmental chemistry track must have a component related to the desired area of certification. These projects must have prior approval from the department. All prospective majors are urged to schedule mathematics and physics courses prerequisite to upper-level chemistry courses as early as possible.

Majors wishing to pursue a career in teaching must complete BIO-111, MTH-150 and 151, PHY-111 and 112, and EDU-111, 120, 221, 350, 454, 460, 472, and EDEP-670 in addition to the prescribed courses in the major. The requirements for certification (teaching internship) will be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

Graduate Study

Chemistry provides the opportunity for Bachelor of Science (B.S.) graduates to continue their study at the master’s level. The Master of Science (M.S.) curriculum is part of a five-year program in which a student typically earns the B.S. after four years. The student may receive graduate credit for certain courses completed during the fourth year, but must earn a B.S. before formal admission to the graduate program, normally at the beginning of the fifth year.

All M.S. degree candidates must present a thesis based on approved research.

The program is intended to extend the broad introductory curriculum which constitutes the B.S. requirements to the master’s level and help undergraduates get involved earlier and more extensively in research. At the graduate level, formal courses are kept to a minimum. The emphases on the research experience and the development of facility with current literature are structured to prepare students for participation in doctoral programs.

Although the program has been organized primarily to specifically benefit students who earn the B.S. degree at Furman, students from other institutions will be considered for admission.

Admission

Admission to Graduate Level Courses

A senior enrolled in the B.S. program at Furman may elect to enroll in certain courses that may contribute to the graduate degree. The student must present to the department credentials that would qualify him or her for admission to a quality graduate program.

Students not enrolled at Furman must present acceptable undergraduate credentials in chemistry courses completed during their senior year.

Admission to Graduate Program

Furman seniors may apply through the department for admission upon successful completion of the B.S. degree. Favorable recommendation will be contingent upon satisfactory performance in chemistry courses numbered 400 or greater.

All other students may apply for admission by presenting acceptable preparation in their undergraduate programs and satisfactory scores on the Graduate Record Examination.

Once admitted, the student will be assigned to a graduate committee that will approve a course of study, research problem and thesis. This committee will include a staff member who will
direct the student’s research problem and at least one additional staff member appointed by the department chair.

Degree Requirements

Admission to Candidacy for the M.S. Degree
The departmental committee will recommend that the student be admitted to candidacy for the M.S. degree at the end of the first term as a regular graduate student, based on:
- satisfactory performance in all courses
- satisfactory progress on a research problem
- satisfactory completion of undergraduate review examinations and the cumulative examination series

A student not making satisfactory progress toward candidacy may be asked to terminate graduate studies.

Academic Status
Students must have at least a 3.00 cumulative grade point average in all graduate work for the master’s degree.

Research and Thesis
CHM-705 must be enrolled in the term immediately preceding completion of the degree program. Credit for CHM-702 and 705 is earned when the student thesis and its defense has been approved.

Examinations
Students are required to show satisfactory performance in the following examination program:
- Undergraduate review examinations are periodic examinations in analytical chemistry, inorganic chemistry, organic chemistry, physical chemistry and biochemistry.
- Cumulative examinations conducted monthly during the academic year are based on departmental seminars and literature readings. Students must pass only a limited number of these examinations, but must complete all examinations during a given year until the requirement is satisfied.
- The final examination requires candidates to pass an oral examination consisting of a defense of thesis.
- Special examinations may be required of any candidate who fails to give a satisfactory overall performance in the graduate program. The requirement is to be specified by the student’s graduate committee and the chair of the department. The student will be informed of the nature and reasons for the examination and will be given adequate time to prepare.

Seminars
All graduate students are required to participate in the departmental seminar and literature reading program. Students will formally enroll in CHM-675 (175) at least twice. However, they are expected to continue to participate in the seminar program until the cumulative examination requirement is completed.

Residence Requirements
A minimum residence of one academic year of graduate study is required and all work for the M.S. degree must be completed within a period of six calendar years.

Typically, only credit earned through Furman can contribute to the award of the M.S. degree. Courses completed elsewhere cannot normally be considered for transfer to the graduate program.

Assistantship Responsibilities
Students must complete assigned assistantship duties in a satisfactory manner.

Courses
Students must complete:
- at least two of the following: CHM-410, 440 or 465, or an approved combination of other chemistry courses numbered 400 or greater,
- CHM-670 and 705, and
- CHM-675 and 702 twice each.
Students have options in their study based upon their selection of a research problem that may include substitution for one of the courses numbered between 400 and 499 in certain circumstances. Furthermore, CHM-670 (180) Topics in Chemistry, is designed as a tutorial course to meet the special needs of individual students.

### Chemistry (CHM) Courses

**075 Seminar in Chemistry**
Seminars presented are based on current literature. Presentations include articles detailing the application of chemical principles and techniques. Surveys of assigned journals are presented individually; more detailed presentations are made by small groups working as teams. Topics include: coverage of recent important developments, global awareness of the application of chemistry to the natural world, experience in making scientific presentations, and encouragement of good literature reading habits. 0 credits.

**101 Chemistry and Global Awareness**
GER: NW (Empirical Study of the Natural World) and NE (Humans & the Natural Environment)
Introduction to the scientific method, how chemists approach the study of nature, interrelationships between theory and experiment, and the nature of scientific information. These concepts are discussed in the context of modern environmental concerns such as energy utilization, global warming, and water/air pollution. Designed specifically for non-science majors. Credit for CHM-101 cannot be granted after completion of any course in the chemistry major sequence. 4 credits.

**110 Foundations of Chemistry**
GER: NWL (Empirical Study of the Natural World with laboratory)
Introduction to the principles of chemistry. Topics include: atomic and molecular structure and chemical bonding, stoichiometry, properties of the states of matter, and energetics of chemical reactions with emphasis on problem solving, conceptual understanding, and analytical reasoning. Laboratory focuses on quantitative measurements and interpretation of data. 4 credits.

**115 Kinetics, Thermodynamics and the Environment**
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans & the Natural Environment)
Prerequisite: CHM-110
Kinetic and thermodynamic principles of chemical reactions including the laws of thermodynamics, acid-base chemistry, solubility, electrochemistry and colligative properties applied in an environmental context. Nuclear chemistry including radioactive decay, nuclear power, and the energetics of nuclear reactions. 4 credits.

**120 Organic Chemistry**
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: CHM-115. May be enrolled simultaneously. Emphasis on the application of chemical principles to carbon compounds. Physical and chemical properties of the major organic functional groups, an introduction to stereochemistry, molecular stability, and related concepts of organic compounds are covered. Laboratory emphasizes reaction set-ups, recrystallization, distillation, extraction, and chromatography. 4 credits.

**220 Bio-Organic Chemistry**
Prerequisite: CHM-120
Introduction to the organic chemistry of living systems. Topics include: the structure and chemistry of proteins, mechanistic enzymology, the organic chemistry of cofactors, DNA-drug interactions, and the biosynthesis of natural products. 4 credits.

**230 Inorganic Chemistry**
Prerequisite: CHM-120
Introduction to inorganic topics, beginning with the Periodic Table. Topics include: main-group chemistry, nuclear chemistry, transition metal chemistry, and solid state chemistry will be explored in more depth. Connections between theory and observation will be highlighted. 4 credits.

**240 Experimental Techniques**
Prerequisite: CHM-120
Laboratory exercises involving multi-step synthesis, purification, and analysis of both organic and inorganic compounds. Use of modern chemical instrumentation, utilization of the chemical literature, and the oral and written presentation of experimental data are requirements. Must also enroll in CHM-230. 4 credits.

**250 Introduction to Research Methods**
An introduction to the fundamental protocols of modern laboratory research, including chemical safety, information fluency, and instrumentation methods. Additional topics include scientific ethics, data preservation, and individualized instruction on project specific techniques. May Experience ONLY. 2 credits.

**251 Advanced Research Methods**
An exploration of the techniques and protocols of modern laboratory research, including chemical safety, information fluency, and advanced instrumentation methods. Additional topics include scientific ethics, data analysis, and individualized instruction on project specific techniques. May Experience ONLY. 2 credits.

**255 Chemists Communicating through Writing**
An introduction to the fundamental aspects of scientific writing. Additional topics include literature resources, data presentation, and individualized instruction on project specific written presentations. May Experience ONLY. 2 credits.
310 Physical Chemistry I
Prerequisite: CHM-120, MTH-151 and PHY-111
Development of the basic concepts of physical chemistry and the theoretical and quantitative foundations for further study in chemistry. Knowledge of calculus and introductory physics is essential. Topics include: introduction to quantized energy levels, molecular structure, spectroscopy, molecular symmetry, chemical kinetics and reaction dynamics. 4 credits.

330 Analytical Chemistry
Prerequisite: CHM-310
Advanced analytical measurements, data analysis and instrumental methods including titrimetry, atomic and molecular spectroscopy and electro-chemistry. Advanced chemical separations including extraction, gas and liquid chromatography and electrophoresis. Laboratory emphasizes intensive hands-on experience with state of the art equipment including voltammographs, ICP, capillary GC-MS, HPLC, HPCE, UV/Vis and emission spectroscopy. 4 credits.

340 Physical Chemistry II
Prerequisite: CHM-310, MTH-160 and PHY-112
The thermodynamics and statistical mechanical aspects of physical chemistry. Laboratory consists of physical measurements and spectroscopic characterization of matter. Working with lasers, computer interfaced instrumentation, high vacuum apparatus and other sophisticated laboratory equipment. 4 credits.

410 Quantum Chemistry
Prerequisite: CHM-310 and MTH-160
The first quarter of the course is an exploration of the origins of quantum theoretical concepts and formalisms. The second quarter presents applications to systems that can be solved exactly (model systems and H atom). The remaining half presents various computational methods used to find suitable approximate solutions for more complex real chemical systems (valence theory). 2 credits.

420 Advanced Topics in Organic Chemistry
Prerequisite: CHM-220
Investigation of the relationship between structure and reactivity in organic chemistry. Advanced topics include: structural types, bonding theories, reaction types, energetics, and synthetic methods as applied to organic molecules and materials. 2 credits.

430 Advanced Topics in Inorganic Chemistry
Prerequisite: CHM-310
Investigation of the relationship between structure and reactivity in inorganic chemistry. Advanced topics include: structural types, bonding theories, reaction types, energetics, and spectroscopy as applied to transition metal complexes, organometallic complexes, solid state materials, and bioinorganic species. 2 credits.

440 Environmental Chemistry
GER: NE (Humans & the Natural Environment)
Prerequisite: CHM-340
Advanced study of chemical processes and chemical measurements as they relate to environmental systems and environmental assessment. Topics include: risk assessment, statistical sampling, atmospheric chemistry, water/soil chemistry, toxicology, waste disposal and energy utilization. Includes environmental measurements laboratories. 4 credits.

450 Chemistry of Advanced Materials
Prerequisite: CHM-120
Introduction to the logical strategies for creating new materials. Discussions cover semiconductors, soft-materials (polymers), nanostructured materials and techniques for materials characterization. 2 credits.

460 Biological Chemistry
Prerequisite: BIO-111, CHM-220, CHM-240 and PHY-111
Analysis of biochemical systems from a rigorously-chemical viewpoint. Topics include: the chemical properties of biological macromolecules, enzyme kinetics and thermodynamics, reaction mechanisms in metabolic pathways, and structural and functional aspects of gene expression. Laboratories involve contemporary methods in biochemistry including high-resolution gel electrophoresis and enzyme kinetic assays. 4 credits.

461 Teaching Methods and Materials in Chemistry
Prerequisite: EDU-464
Developing teaching skills in the science laboratory. Topics include planning and preparation, safety and storage, instruction and assessment. Practicum will provide experiences teaching in the laboratory/classroom. 4 credits.

465 Advanced Biological Chemistry
Prerequisite: CHM-460
Advanced topics in bio-organic chemistry, mostly related to enzymes, kinetics and coenzymes, as well as detailed discussion of nucleic acid chemistry/biochemistry, molecular aspects of genetics, and gene control. Laboratory includes isolation and purification of enzymes, determination of DNA structures, DNA sequencing, and individual mini-projects. 4 credits.

470 Advanced Topics in Physical Chemistry
Prerequisite: CHM-310
The foundation of magnetic resonance both for electrons and nuclei which are applied in electron spin resonances (ESR) and nuclear magnetic resonance (MNR), respectively. Equal coverage will include principles of lasers and selected applications to areas of analytical chemistry and biochemistry. 2 credits.
471 Physical Chemistry of Energy Conversion
Prerequisite: CHM-310
Fundamentals of advanced energy conversion processes with an emphasis on thermodynamics, kinetics, and quantum chemistry. Topics will include biofuels, photovoltaic cells, batteries, and fuel cells. 2 credits.

501 Independent Study
Students conduct an independent study not involving laboratory research on a selected topic in consultation with the department chair. Oral presentation and formal paper required. Variable credit.

502 Undergraduate Research
Laboratory research of an original nature is conducted under the direct supervision of a chemistry professor. Oral presentation and formal paper required. Variable credit.

670 Topics in Chemistry
Topics important in various fields of modern chemistry. 4 credits.

675 Graduate Seminar in Chemistry
Students present seminars based on current literature. Surveys of assigned journals are presented individually; more detailed presentations are made by small groups. 4 credits.

702 Research
Original laboratory research. Variable credit.

705 Thesis
Master’s thesis. Variable credit.

Classics
Professors: Blackwell (Chair), Leen
Assistant Professor: Childree

Classics offers courses in the languages and cultures of the ancient Greek and Roman worlds. The department offers majors in Classics, Greek, Latin and participates in the Ancient Greek and Roman Studies concentration. Refer to the Interdisciplinary Studies section of this catalog for specific requirements for the Ancient Greek and Roman Studies concentration.

Incoming freshmen and transfer students who have previously studied Latin should take a placement test in the language. Those who intend to continue study in Latin must take the placement test. The placement test determines the lowest level at which students may receive credit and where they must begin their study of the language at Furman. Students may opt to begin a new language.

There is no placement test for ancient Greek. Students who have studied Greek must consult with the department chair to determine placement. Students may not enroll an ancient language course through the pass-no pass grading option until they have satisfied the general education requirement in foreign language.

Classics Major

Students completing a major in classics must complete ten courses: four courses specifically in the classics discipline; four courses numbered 201 or greater in Greek or Latin; and two courses numbered 201 or greater in the other ancient language. Independent study and special topics courses are not normally considered appropriate experiences for meeting major requirements.

Greek Major

Students completing a major in Greek must complete eight courses in the appropriate language beyond the general education
requirement. Three courses from CLS-111, 120, 211, 220, 221, 230, 231, 320 and 504 may be substituted. ART-233 and HST-101 are also recommended for a major in Greek.

**Latin Major**

A major in Latin consists of eight courses beyond LTN-201 and must include:
- LTN-202, and
- at least four of the following courses:
  - LTN-231, 232, 233, 234, 235, 301, 450 or 504.

Up to three courses from the following may also contribute to the Latin major: CLS-111, 120, 211, 221, 220, 231, 230, 320 or 504.

One first year seminar or first year writing seminar taught by a member of the Classics Department may also, with approval, contribute to the major.

Majors wishing to pursue a career in teaching must complete EDU-111, 120, 221, 220, 231, 230, 320 or 504 in addition to the prescribed courses in the major. The requirements for certification (teaching internship) will be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

**Classics (CLS) Courses**

**111 Introduction to Classics**
*GER: HA (Historical Analysis of Human Interactions)*
Introduction to the field of Classical Studies, focusing on philology, history, archaeology, art, and architecture and their sub-fields. Other topics include: the intellectual history of the discipline, transmission of texts, scholarly theory and methodology, and cultural informatics. 4 credits.

**120 Mythology**
*GER: TA (Critical, Analytical Interpretations of Texts)*
Greek and Roman mythology. Topics include: definitions of myth, theory and interpretation of myth, the literary, historical and cultural context of Greek and Roman myths, and the principal ancient sources. 4 credits.

**211 Classical Archaeology**
*GER: HA (Historical Analysis of Human Interactions)*
Illustrated lecture survey of the principal archaeological sites in ancient Greece and Italy. Study of the material culture, monumental remains, and the developing styles in art, architecture, and city planning. Introduction to the goals, methodologies, and achievements of archaeological excavation. 4 credits.

**220 Greek Civilization**
*GER: HA (Historical Analysis of Human Interactions)*
Chronological survey of Greek political, military, and economic history, development of literature, sculpture and major architecture; attention to domestic and religious aspects of the Greek experience. 4 credits.

**221 Roman Civilization**
*GER: HA (Historical Analysis of Human Interactions)*
A study of Rome from its origins to its putative fall in the fifth century. Focus on the development and influence of Roman social, cultural, and political structures. 4 credits.

**230 Reading Greek Literature**
*GER: TA (Critical, Analytical Interpretations of Texts)*
Survey in English translation of Classical Greek literature, including the Homeric epic poems, Greek tragedy and comedy, and other significant genres. 4 credits.

**231 Reading Latin Literature**
*GER: TA (Critical, Analytical Interpretations of Texts)*
Survey in English translation of Latin literature. Topics include: a general survey of Latin literature and the concentrated reading and interpretation of selected works by authors such as Plautus, Caesar, Cicero, Catullus, Horace, Vergil, Livy, Seneca, and others. 4 credits.

**320 Travel Study in Classical Civilizations**
Cultural history of the ancient Greek and Roman world, including art and architecture, archaeology, literature, religion, and daily life. 4 credits.

**504 Directed Independent Study**
Variable credit.

**Greek (GRK) Courses**

**110 Elementary Greek I**
Introduction to the fundamentals of fifth century Attic Greek. Topics include: pronunciation, basic vocabulary, grammar and syntax, practice in reading basic Greek. Material is adapted from classical texts and cultivates an appreciation of Greek literature and culture. 4 credits.
120  Elementary Greek II  
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY  
Prerequisite: GRK-110  
Continuation of elementary Greek sequence. Topics include: continued study of vocabulary, grammar and syntax; reading more difficult Greek; gaining greater appreciation of Greek literature and culture. 4 credits.

201  Intermediate Greek  
GER: FL (Foreign Language)  
Prerequisite: GRK-120  
Reading and interpretation of writings from the Classical Greek authors and the Greek New Testament. Topics include new vocabulary, review of basic grammar and introduction of new grammar, guidance in translation and comprehension of moderately difficult Greek. 4 credits.

210  Greek New Testament  
GER: TA (Critical, Analytical Interpretations of Texts)  
Prerequisite: GRK-201  
Selected readings from the Greek New Testament and other texts in Koine Greek, with particular attention to the differences in idiom between Attic and Koine Greek. 4 credits.

220  Koine and Hellenistic Greek  
Prerequisite: GRK-201  
Selected readings from biblical, early Christian, and secular literature from 300 B.C. to 200 A.D. Course may be repeated for credit based on change of topic. 4 credits.

231  Greek Epic  
GER: TA (Critical, Analytical Interpretations of Texts)  
Prerequisite: GRK-201  
Selected readings from Homer: Iliad or Odyssey. Attention is paid to differences between Epic and Attic idiom, poetic features (e.g. metrics, figures of speech), ancient scholarship on Homeric poetry, and the influence of Greek epic on later Western epic poetry. Course may be repeated once with change of author or topic. 4 credits.

232  Greek Drama  
GER: TA (Critical, Analytical Interpretations of Texts)  
Prerequisite: GRK-201  
Readings from Aeschylus, Sophocles, Euripides, or Aristophanes. Attention paid to the evolution of Greek drama and the authors’ places within that evolution. Course may be repeated once with a change of author or topic. 4 credits.

233  Greek Prose  
GER: TA (Critical, Analytical Interpretations of Texts)  
Prerequisite: GRK-201  
Readings from Herodotus, Plato, or Thucydides. Attention paid to advanced grammar, rapid comprehension, and scholarly interpretation of the text. Course may be repeated once with change of author or topic. 4 credits.

504  Directed Independent Study  
Prerequisite: GRK-201  
Variable credit.

Latin (LTN) Courses

110  Elementary Latin I  
Prerequisite: appropriate placement  
Introduction to the fundamentals of classical Latin. Topics include: pronunciation, basic vocabulary, grammar and syntax, practice in reading basic Latin. Graded reading material is adapted from classical texts and cultivates an appreciation of Latin literature and culture. 4 credits.

115  Intensive Elementary Latin  
Prerequisite: appropriate placement  
Intensive course in the basic skills leading to an appropriate use of the language and an appreciation of the culture and literature of ancient Rome. Topics include: review of pronunciation, basic vocabulary and grammar, introduction to more advanced grammar and syntax, etymology, and practice in reading basic Latin. Enrollment by placement only. 4 credits.

120  Elementary Latin II  
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY  
Prerequisite: LTN-110  
Continuation of elementary Latin sequence. Topics include: continued study of vocabulary, grammar and syntax; reading more difficult Latin; gaining greater appreciation of Latin literature and culture. 4 credits.

201  Intermediate Latin I  
GER: FL (Foreign Language)  
Prerequisite: LTN-115 or 120  
Reading and interpretation of writings by classical Latin authors. New vocabulary, review of basic grammar and introduction to new grammar, guidance in translation and comprehension of moderately difficult Latin. 4 credit.

202  Intermediate Latin II  
GER: FL (Foreign Language)  
Prerequisite: LTN-201  
Builds upon the proficiency developed through first course in Intermediate Latin. Review of morphology, grammar and syntax; reading of prose and poetry with the aim of developing proficiency in reading Latin and surveying Latin literature. 4 credits.

220  Medieval and Renaissance Latin  
GER: TA (Critical, Analytical Interpretations of Texts)  
Introduction to Medieval and Renaissance poetry and prose. Syntax of Medieval Latin, medieval thought, and the transmission of classical culture through the Middle Ages and into the Renaissance. Course may be repeated for credit based on change of topic. 4 credits.
231  Literature of the Roman Republic  
*GER: TA (Critical, Analytical Interpretations of Texts)*  
Prerequisite: LTN 201 or LTN-202  
Selected readings from authors like Plautus, Terence, Caesar, Cicero, Catullus, Lucretius, or other authors of the Roman Republic. Attention is paid to advanced grammar, rapid comprehension, and scholarly interpretation of the text. Course may be repeated for credit based on change of topic. 4 credits.

232  Literature of the Augustan Age  
*GER: TA (Critical, Analytical Interpretations of Texts)*  
Prerequisite: LTN 201 or LTN-202  
Selected readings from Vergil, Ovid, Horace, Livy, or other authors of the Augustan period. Attention is paid to advanced grammar, rapid comprehension, and scholarly interpretation of the text. Course may be repeated for credit based on change of topic. 4 credits.

233  Literature of the Roman Empire  
*GER: TA (Critical, Analytical Interpretations of Texts)*  
Prerequisite: LTN 201 or LTN-202  
Selected readings from Seneca, Lucan, Petronius, Tacitus, Juvenal, Apuleius, or other authors of the Roman Imperial period. Attention is paid to advanced grammar, rapid comprehension, and scholarly interpretation of the text. Course may be repeated for credit based on change of topic. 4 credits.

234  Literature of the Late Antique and Medieval Period  
*GER: TA (Critical, Analytical Interpretations of Texts)*  
Prerequisite: LTN 201 or LTN-202  
Selected readings from authors of the late antique and medieval periods of Latin literature. Attention is paid to advanced grammar, rapid comprehension, and the scholarly interpretation of the text. 4 credits.

235  Studies in Advanced Latin  
*GER: TA (Critical, Analytical Interpretations of Texts)*  
Prerequisite: LTN-202  
Selected readings from genres such as satire, letters, or drama. Attention is paid to advanced grammar, rapid comprehension, and scholarly interpretation of the text. Course may be repeated once with a change of topic. 4 credits.

301  Latin Prose Composition  
Study of Latin syntax and the expression of ideas of moderate complexity in Latin. 4 credits

450  Teaching Latin in Grades 9-12  
Designed for senior level teacher candidates in Latin. Provides opportunities for candidates to apply Latin pedagogy in a secondary classroom setting under the supervision of Furman faculty and mentorship of a master teacher. 3 credits.

504  Directed Independent Study  
Variable credit.
Communication Studies

Professor: Letteri (Chair), O’Rourke
Associate Professors: Armstrong, DeLancey, King
Assistant Professors: Inabinet, Kwami
Lecturer: E. Price
Adjunct: Bentley

To graduate with a major in Communication Studies, students are required to successfully complete a minimum of nine courses (36 credits).

All majors must successfully complete:

- COM-101, 121, 201, and 221,
- at least three additional Communication Studies courses numbered between 200 and 499, and
- two more Communication Studies courses.

Only one course (four credits) involving individualized instruction (independent study, research, or internships numbered between 501 and 509) may contribute to major requirements. Additionally, Communication Studies majors must have at least a 2.00 grade point average in all courses that satisfy major requirements.

Admission to the major is approved on a rolling basis. Prospective majors must have completed no less than 32 and typically no more than 64 credits and have a cumulative grade point average of at least 2.00 at the time of application. Students interested in majoring in Communication Studies are encouraged to visit the department chair to discuss their admission to the major.

Communication Studies (COM) Courses

101 Public Speaking
Study of the fundamental principles and strategies of informative, persuasive, and ceremonial speaking. Emphasis on how to research, organize, and deliver a speech. The ethical, political, and social character of public speaking is also examined. Students perform a variety of speeches and oral exercises and serve as speech critics and interlocutors. 4 credits.

111 Argumentation
Study of the precepts, theories, strategies, and ethics of argument. Students critically analyze arguments found in speeches, public debates and controversies, newspaper articles and editorials, television news programs, and scholarly texts. Students write argumentative essays, present argumentative speeches, and engage in class debates. 4 credits.

121 Digital Communication
GER: VP (Visual and Performing Arts)
The use of digital, electronic media in the cultivation of democratic society. Students will gather information and learn to transmit that information through blogs, podcasts, video, and other digital media. 4 credits.

131 Broadcast Communication
Study of the journalistic, technical, and aesthetic aspects of television production. Critical analysis of electronic news texts and to research, write, videotape, and edit news stories. 4 credits.

133 Video Documentary
Examines the research, theory, aesthetics and production techniques of the video documentary. Students will work together to produce a 15-to-20-minute long documentary. They will conduct research, shoot video, and edit the final documentary. May Experience ONLY. 2 credits.

141 Small Group Communication
Investigation and application of theories of small group communication. A systemic view of small groups focusing on the communication competencies and communication processes involved in successful small group leadership and decision making. 4 credits.

201 Introduction to Rhetoric
Topical survey of the major questions and controversies in rhetorical theory, criticism, and practice. Topics include: classical canons of rhetoric, rhetoric’s role in civic life, and rhetoric’s relation to power, politics, law, education, and ethics. Readings may include selections from Isocrates, Plato, Aristotole, Cicero, Quintilian, Nietzsche, Burke, Toulmin, Perelman, Habermas, Foucault, White, Allen, and others. 4 credits.

221 Introduction to Mass Communication
The nature and history of mass communication. Beginning with oral communication and the literacy revolution and moving to print, electronic, and digital forms of communication. Examining the social, economic, political, legal, and cultural aspects of mass communication, as well as the role of technology in the development of mass media. 4 credits.
301 Rhetorical Criticism  
GER: TA (Critical, Analytical Interpretation of Texts)  
Survey of the major methods of rhetorical criticism, including neo-Aristotelianism, dramatism, social movement rhetoric, close textual analysis, and others. Topics include: the theoretical underpinnings of these methods, examining the nature of rhetorical texts, analyzing scholarly essays that employ these methods, and writing and presenting essays based on critical analysis of rhetorical texts. 4 credits.

311 Rhetoric in the Ancient World  
GER: TA (Critical, Analytical Interpretation of Texts)  
The history of rhetorical theory and practice from 500 BCE to 500 CE. Focus on Greek and Roman rhetorics’ relation to politics, law, religion, philosophy, liberal education and culture along with an examination of ancient rhetorics’ influence on medieval rhetoric. Readings include selections from the sophists, Isocrates, Plato, Aristotle, Cicero, Quintilian, Tacitus, and Augustine. 4 credits.

312 Rhetoric in the Modern World  
GER: TA (Critical, Analytical Interpretation of Texts)  
The history of rhetorical theory and practice from the Renaissance to the present. Focus on the European tradition with special attention given to rhetoric’s relation to liberal education, politics, law, ethics, religion, myth, and ritual. Readings are from primary texts in the rhetorical tradition and may include selections from Petrarch, Salutati, Valla, Bracciolini, Cavalcanti, Ramus, Erasmus, Bacon, Hobbes, Lamy, Fenelon, Mackenzie, Locke, Vico, Monboddo, Blair, Campbell, Whately, Theremin, Nietzsche, Richards, Weaver, Burke, Perelman, Toulmin, Foucault, Habermas, and others. 4 credits.

315 U.S. Public Address I: 1630-1865  
GER: TA (Critical, Analytical Interpretation of Texts)  
History and criticism of major U.S. speeches and rhetorical texts. Examination of a broad range of historical and rhetorical factors that influenced the construction and reception of speeches from the colonial period through the end of the Civil War. Focus on the political, religious, legal, and social exigencies to which the speeches responded, as well as the place of these rhetorical texts in U.S. public controversies. 4 credits.

316 U.S. Public Address II: 1866-Present  
GER: TA (Critical, Analytical Interpretation of Texts)  
History and criticism of major U.S. speeches and rhetorical texts. Examination of a broad range of historical and rhetorical factors that influenced the construction and reception of speeches from the end of the Civil War to the present. Focus on the political, religious, legal, and social exigencies to which the speeches responded, as well as the place of these rhetorical texts in U.S. public controversies. 4 credits.

321 Media Criticism  
GER: VP (Visual and Performing Arts)  
Critical methods used to analyze the mass media and popular cultural texts. The theoretical basis of such critical methods as semiotics, psychoanalysis, narrative and ideological theory, and cultural studies, and how to use these methods to analyze media texts such as television shows, movies, and magazine advertisements. 4 credits.

331 Media History  
GER: HA (Historical Analysis of Human Interactions)  
Examining the changing nature, structure, and function of mass media institutions in the United States and their historical relationships to society and culture from the founding of the republic to the end of the 20th century. 4 credits.

335 Political Economy of Mass Media  
Examining the structure, regulation, economics, ownership, and technology of mass media, as well as the influence of these factors on global media content. 4 credits.

337 International Communication  
GER: WC (World Cultures)  
A survey of the different media systems in Africa, Asia, Europe, Latin America, Middle East and Oceania. Exploring the basic characteristics of media philosophies, reporting, content and audience in each world region, and discussion of the impact of media globalization (‘Westernization’ of the media, clash of cultures, transnational media conglomerations, new technologies, etc.). 4 credits.

341 Interpersonal Communication  
Theoretical overview of the oral and nonverbal strategies individuals use when negotiating perspectives on the self and others. Areas of focus include the communicative dynamics involved in friendship, marriage, family, student-teacher, and work relationships. 4 credits.

343 Organizational Communication  
Study of the communication within organizations and between organizations and the public. Using theoretical essays and case studies, topics include: hierarchical and participatory decision-making systems, the communicative relationships between and among employers, employees, and the public, and communication-based methods of analyzing corporate culture and resolving ethical dilemmas in the workplace. 4 credits.

351 Advocacy  
Study of the history, theories, principles, and strategies of public advocacy in the process of social, political, economic, and legal change. Students examine case studies of advocacy campaigns, consider the ethical and ideological implications of such campaigns, and may engage in service-learning projects associated with a local integrated advocacy campaign. 4 credits.
353 Political Communication
GER: HA (Historical Analysis of Human Interactions)
Historical and theoretical study of the modern public sphere and public life in Europe and the United States. Focus on how transformations of political ideals, social and economic institutions, and the media have changed the character of political discourse. Examination of how the changing relationships among state governments, political parties, special interest groups, and social movements affect political discourse. 4 credits.

355 Propaganda
History, theory, and critique of propaganda. Case studies of propaganda relating to a variety of discursive and social practices including speeches, public spectacles, media events, art, and film. Examining forms of state and non-governmental propaganda. Topics include: American propaganda during WWI, Nazi and Fascist propaganda, and the Communist propaganda programs of the Soviet Union and China. 4 credits.

401 Studies in Rhetoric
Concentrated study in one area, controversy, or theorist of rhetoric. Course topics change with each offering. Possible topics include the rhetoric of law, the rhetoric of social movements, Native American rhetoric, Cicero, or Kenneth Burke. May be repeated for credit with change of topic. 4 credits.

411 African American Rhetoric
GER: TA (Critical, Analytical Interpretation of Texts)
The persuasive efforts, primarily oratorical, by African Americans attempting to gain freedom, establish citizenship, and acquire equal rights. Emphasis on discursive and non-discursive rhetorical strategies of black identity, power, and community. Consideration of the rhetorical construction of ideologies of struggle, the external and internal debates characteristic of black social movements, and the rhetorical cultivation of black consciousness. 4 credits.

412 International Women’s Rhetoric
GER: WC (World Cultures)
Analysis of speeches given by women in the international community about their conditions and their circumstances. Exploring the historical, socio-political, and cultural contexts of speeches by women to understand the rhetorical strategies and effects of their messages. 4 credits.

414 Rhetoric of Emerging Democracies
GER: WC (World Cultures)
The rhetoric of non-U.S. democratic movements. Focus on nonviolent movements and the rhetorical aspects of mixed violent and nonviolent movements of the twentieth and early twenty-first-century. Primary emphasis is on the speeches and other persuasive appeals by reformers, including the justifications for democratic reform, forms of protest, strategies of dissent, and confluence of democratic, anti-colonial, and nationalist themes. Also includes consideration of the African, Asian, Latin American, Near Eastern, and Eastern European cultural contexts out of which these rhetorical concerns and movements arise. 4 credits.

421 Studies in Mass Media
Concentrated study in one area or theorist of mass communication. Course topics will change with each offering. Potential topics include the global media integration, the internet as a public sphere, public journalism, the theories of Marshall McLuhan, Hollywood film genres, or Italian film. 4 credits.

431 Rhetoric of Social Activism
Intensive study of the discourses of social activism. Study and application of the techniques of textual reconstruction, editing, and criticism, as well as interviewing and oral history. Students will work to preserve and provide scholarly access to the speeches of social activists and to the words of the scholars who study them. Course will usually involve travel to one or more scholarly centers and study with those who staff those centers. May Experience ONLY. 2 credits.

432 Places and Spaces of Early U.S. Controversy
Analysis of primary U.S. texts in the physical places and textual spaces they inhabited in public debate, with visual rhetoric and architecture read in relationship to written argument. Visits to museums, archives, and unmarked sites reveal insights on agency, circulation, and ethics. May Experience ONLY. 2 credits.

435 Race, Class, and Gender in Mass Media
Examining how social perceptions of race, gender, and class are influenced by the mass media. The social connections between and among representations in print, film, electronic, digital media, institutional practices, and our experience of race, gender and class. 4 credits.

460 Communication Ethics
GER: UQ (Ultimate Questions)
The ethical questions raised by the practice of human communication. The sources of ethical standards, methods of ethical criticism, and perspectives on the ethics of persuasion. 4 credits.

461 Communication Law
Issues confronting public speakers, journalists, advocates, debaters, and film and television producers when they seek to speak freely and responsibly. Topics include: seditious speech, symbolic conduct, fighting words, offensive speech, obscenity, defamation, commercial speech, free press v. fair trial, media regulation, advertising codes, and the theoretical justifications for free expression. 4 credits.

470 Seminar in Rhetoric
Intensive treatment of a major question, theme, or issue in the field of rhetoric. 4 credits.
475 Seminar in Mass Communications
Intensive treatment of a major question, theme, or issue in the field of mass communication. 4 credits.

501 Independent Study
Qualified students study in a specific subject or theory of communication under the supervision of a faculty member. Students are required to do intensive reading and research in their subject, meet with their faculty supervisor on a regular basis, write an extensive paper, and give an oral presentation on their work. This course may be taken more than once but may not be counted toward the major more than once. It may not be completed on a pass-no pass basis. Variable credit.

502 Directed Research
Variable credit.

503 Individualized Internship
Variable credit.

505 Structured Internship
Directed individualized internship in the field of communication. Studying the communicative practices employed in such settings as a courtroom, television or radio station, newspaper, magazine, advocacy group, mediation center, or arts organization. Students are required to work approximately 175 hours at their internship site, meet regularly with their workplace and faculty advisors, and submit a log, portfolio, and academic paper relating to their internship work. This course may be taken only once and may not be completed on a pass-no pass basis. Variable credit.

509 Forensics
The research, analysis, organization, and practice of debates and speeches for on-campus and intercollegiate debating and speaking competitions. Applying theories of argumentation to develop cases for and against public issues. 0 credits.

Computer Science

Professors: Abernethy, J.T. Allen, Gabbert, Treu (Chair)
Associate Professor: Healy
Assistant Professor: Tartaro
Lecturer: Catron

The department offers majors in computer science and information technology. It also participates in an interdisciplinary major, computing and applied mathematics (jointly with Mathematics). Students may choose to double major with any two of these programs of study, provided all choices for upper-level electives are unique. Students interested in any of these majors should consult with the department chair.

Computer Science Major

To earn a degree in computer science, a student must have at least a 2.00 grade point average for all computer science courses (excluding the recently retired CSC-101) and all other courses enrolled that satisfy major requirements.

A major must include:
• CSC-105, 121, 122, 231, 361 and 461,
• CSC-261 or MTH-260,
• CSC-475 or 502,
• MTH-141 or 150,
• MTH-151, and
• at least three more courses from the following, only one of which may be in mathematics: CSC-331, 332, 341, 342, 343, 344, 345, 346, 347, 351, 352, 353, 363, 475, 501, or 502; MTH-320, 335, 340, 346, 360, or 460.

Computing and Applied Mathematics Major

To graduate with a major in computing and applied mathematics, a student must have at least a 2.00 grade point average for all computer science courses (excluding the recently retired CSC-101) and mathematics courses enrolled (excluding MTH-110, 241, 301, and 302).
Majors must successfully complete:

- all courses in the core: CSC-105, 121, and 122, MTH-141 or 150, and MTH-151, 160, and 250,
- one proof-based course: CSC-261 or MTH-260,
- at least two of the following courses providing in-depth experiences: CSC-361, 363, 461, 502, MTH-330, 340, 360, 450 or 460, and
- at least two more courses from the following focusing on the application of computing or mathematics: CSC-341, 343, 344, 345, 465, MTH-235, 255, 335 or 341.

The four courses meeting the requirements for in-depth experiences and the application of computing and mathematics must be evenly divided between CSC and MTH, two in each discipline.

Information Technology Major

To graduate with a major in information technology, a student must have at least a 2.00 grade point average for all computer science courses enrolled (excluding the recently retired CSC-101).

A major must include:

- CSC-105, 121, 122, 231, 261, and 271,
- CSC-475 or 502,
- MTH-141 or 150,
- at least two more courses from the following: CSC-332, 341, 342, 346, 347, 351, 352, or 353

Computer Science (CSC) Courses

105 Introduction to Computer Science

*GER: MR (Mathematical and Formal Reasoning)*

Introduction to computing through the lens of a significant problem domain. How is computing used to solve problems? What do you need to know to use computing to solve applied problems? A single potential problem is studied from domains which include the arts, sciences, education and medicine. Examples of specific topics include assistive technology, artificial intelligence, social media, social agents and robots, humanities, games or any other area that demonstrates significant computer science applications. 4 credits.

121 Introduction to Computer Programming

Prerequisite: CSC-105, BIO-111, CHM-110, EES-110, EES-112, EES-113, MTH-141, MTH-150, or PHY-111. May be enrolled concurrently with department permission.

*GER: MR (Mathematical and Formal Reasoning)*

Algorithms, programs and computers. Basic programming and program structure. Debugging and verification of programs. Survey of computers, languages, systems and applications. 4 credits.

122 Data Structures and Algorithms

Prerequisite: CSC-105 and CSC-121

Continuation of CSC-121. Emphasis on use of data structures to model and implement algorithms as computer programs. Principles of high-level program analysis and design. 4 credits.

221 Topics in Programming

Prerequisite: CSC-121

Intensive experience in which students study a new programming language or programming paradigm. Practice solving problems individually as well as in a team environment. Significant laboratory component required. Course may be repeated with change of topics. May Experience ONLY. 2 credits.

231 Computer Organization

Prerequisite: CSC-105 and CSC-121

Computer structure, machine language, instruction execution, addressing techniques and digital representation of data. Systems organization and logic design. Several projects. 4 credits.

241 iPhone Applications in Objective C

Prerequisite: CSC-121

Exploration into developing simple applications on the iPhone/iPod Touch platforms. Introduction to the Objective C programming language using Apple’s iPhone Software Developers Kit. May Experience ONLY. 2 credits.

261 Discrete Structures for Computer Science

Prerequisite: CSC-105, CSC-121 and MTH-140 or appropriate placement

Introduction to induction, recursion, Boolean algebra and switching theory, directed and undirected graphs, finite state machines and formal languages. 4 credits.

271 Morals, Law and Society in a Digital Age

A study of social, legal, and moral issues raised by the development of digital information technologies. Examine the interaction between law, policy, and technology relating to current issues such as intellectual property, privacy, computer crime, and the risks of computing. Topics vary. 4 credits.
331 Computer Architecture
Prerequisite: CSC-231
The design and structure of modern computers. The
evolution of computer architecture, processor design,
information storage, and operating system organization.
Several projects. 4 credits.

332 Data Communications and Networking
Prerequisite: CSC-231
Introduction to the concepts and principles of data
communications and computer networks. Topics include
LANs, internetworking, routing, congestion and flow
control, client/server applications and network security.
4 credits.

341 Database Management Systems
Prerequisite: CSC-122
Fundamental principles of data base models and data
base management systems design, implementation, and
application. 4 credits.

342 Web-Based Application Design
Prerequisite: CSC-102 or 121
An intensive, project-based introduction to a wide range of
programming techniques used in developing interactive,
data-driven Web applications. Coverage includes the
integrated use of client-side scripting, server-side scripting,
online database technology and multimedia authoring tools.
Special topics of current interest are also covered. 4 credits.

343 Artificial Intelligence
Prerequisite: CSC-122 and 261 or MTH-260
A study of methods and models for making a computer
display behavior that would be considered intelligent if done
by a human. 4 credits.

344 Computer Graphics and Image Processing
Prerequisite: CSC-122 and 261 or MTH-260
Fundamentals of computer graphics and image processing.
Topics include: mathematical representations for scaling,
rotation, translation and projection on viewing plane. Major
project requires design and implementation of a three-
dimensional graphics display system. 4 credits.

345 Computational Science
Prerequisite: CSC-121 and MTH-151
Exploration of algorithms for simulation, data analysis,
and optimization necessary for a variety of scientific
applications. Parallel computation will also be explored as
an alternative when serial algorithms are not sufficient.
4 credits.

346 Operating Systems
Prerequisite: CSC-122
An introduction to the design of modern operating systems.
Topics include processes, scheduling, synchronization,
deadlock, file and memory management, I/O, security, and
distributed systems. 4 credits.

347 Human-Computer Interaction
Prerequisite: CSC-122
Introduction to the field of Human-Computer Interaction
(HCI) focusing on a user-centered design process including
the theory and application of what makes a user interface
usable. Application of design principles and empirical
studies to identify a design problem, analyze requirements,
and iteratively design, implement and evaluate a solution.
HCI research topics such as social technologies, universal
usability and participatory design will also be examined. 4
credits.

351 Project Management
Prerequisite: CSC-121
Principles, tools, and techniques of software project
management. Major topics include initiating projects,
planning projects, executing and controlling projects,
closing projects, and professional responsibilities. 4
credits.

352 Systems Analysis
Prerequisite: CSC-122
A study of the principles involved in the design and
implementation of computer applications. Topics include
problem analysis techniques, documentation standards,
prototyping and fourth-generation languages, and
organizational impact of information systems. 4 credits.

353 Software Engineering
Prerequisite: CSC-122
Principles of design of large computer programs and
systems of programs. Topics include file structures and
advanced features of business-oriented languages. 4
credits.

354 Information Structures
Prerequisite: CSC-122 and 261 or MTH-260
Basic concepts of data. Linear lists, strings, arrays and
orthogonal lists. Representation of trees and graphs.
Multilinked structures. Analysis of the time and space
complexity of several important algorithms. 4 credits.

355 Programming Languages Structures
Prerequisite: CSC-122
Study of several programming languages including
specification of syntax and semantics. Global properties of
algorithmic languages. Several programming projects. 4
credits.

461 Computational Theory
Prerequisite: CSC-122 and 261 or MTH-260
Introduction to topics in computability, automata and formal
language theory. Applications of these concepts to various
areas of computer science. 4 credits.

465 Introduction to Numerical Analysis
Introduction to the numerical algorithms fundamental to
mathematical and scientific problems. 4 credits.
Earth and Environmental Sciences

Professors: Andersen (Chair), Garihan, Halfacre, Ranson
Associate Professors: Dripps, Muthukrishnan
Assistant Professor: Beymer-Farris
Adjunct: Ranhofer

Earth and Environmental Sciences (EES) offers three degree options. Students may choose a major in Earth and Environmental Sciences leading to either a Bachelor of Science (B.S.) or a Bachelor of Arts (B.A.) degree, or they may choose a major in Sustainability Science leading to a Bachelor of Science (B.S.) degree. Students may not double major in these disciplines.

Earth and Environmental Sciences Major

The Earth and Environmental Science (EES) curriculum is flexible and can be tailored to meet the academic interests of the student interested in Earth history, Earth process, and human transformation of the planet.

Candidates for the B.S. degree must complete:
- EES-110, 111, 112, or 113
- EES-220; and EES-472,
- CHM-110 and 115,
- MTH-150 or MTH-140 and 141, and
- at least seven more courses in EES.

Candidates for the B.A. degree must complete:
- EES-110, 111, 112, or 113
- EES-220, and
- at least six more courses in EES.

Students anticipating graduate study and professional work in earth and environmental sciences should obtain the B.S. degree. The following are also recommended: BIO-340, CHM-120, MTH-151 and PHY-111.
Sustainability Science Major

The Sustainability Science major focuses on the critical linkages between global environmental, human, and social systems and emphasizes complex systems analysis focusing on understanding sustainability related problems and assessing potential solutions.

Candidates for the B.S. degree with a major in Sustainability Science must complete:
- EES-112 and SUS-120,
- SUS-240, 241, 242, and 472
- at least five additional courses from the list below with no more than three courses selected from any one group:

Environmental Security
ANT-303 Cultural Ecology
BIO-340 Ecology
BIO-341 and 342 Tropical Ecology and Field Studies in Tropical Ecology
BIO-343/EES-343 Environmental Systems
BIO-344 African Ecology
BIO-380 Freshwater Ecology
BIO-401 Applied Plant Science
BIO-423 Marine Biology
BIO-430 Natural Resource Management
EES-201 Geographic Information Systems
EES-230 Watershed Hydrology
EES-301 Remote Sensing of the Environment
EES-343 Environmental Systems
EES-410 Ocean and Climate Systems
EST-301 Environment and Society
PSC-213 Environmental Policy

Human Security
ECN-237 Economics of Poverty and Inequality
ENG-416 Environmental Writing
GGY-230 Principles of Geography
HSC-304 Community & Environmental Health
PHL-303 Environmental Ethics
PHL-304 Ethics of Globalization
PVS-101 Introduction to Poverty Studies
PSC-214 Environmental Law & Conservation Advocacy
REL-362 Religion & the Environment
SOC-222 Population & the Environment

Sustainable Production & Consumption
BUS-312 Sustainable Corporation
ECN-236 Economics of the Environment
ECN-243 Economic Growth & Development
PSC-227 Environmental Politics in China

It is strongly recommended that these courses be chosen in consultation with a faculty advisor and represent a diverse set of contributions from several departments.

Students interested in environmental and/or sustainability issues, but not wishing to major in the sciences may complete the Environmental Studies concentration; consult the Interdisciplinary section of this catalog for more information. Earth and Environmental Sciences majors may also fulfill the requirements for the Environmental Studies concentration.

Earth and Environmental Sciences (EES) Courses

110 Earth Systems
GER: NWL (Empirical Study of the Natural World with laboratory)
An introduction to Earth as an evolving, integrated, and cyclic system. Examination of major surficial and internal Earth processes that shape the human environment and control the distribution of geologic resources such as water, fossil fuels, strategic minerals, and soils. Students may receive credit for only one of EES-110, 111, 113. 4 credits.

111 Earth and the Silver Screen
GER: NW (Empirical Study of the Natural World) and NE (Humans and the Natural Environment)
Basic concepts of earth and environmental sciences by exploring the portrayal of these concepts in mainstream television and film. Students may receive credit for only one of EES-110, 111, 113. 4 credits.

112 Environmental Science
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)
Study of human transformation of Earth as a trade-off for growth of the human enterprise. Topics include changes in population, land cover (agriculture, deforestation, urbanization), climate, nitrogen and phosphorous cycles, biodiversity; limits of water, soil, energy and mineral resources; and links between population and consumption patterns. 4 credits.

113 Natural Hazards and Natural Disasters
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)
An introduction to the understanding of natural hazards and disasters (earthquakes, volcanoes, tsunamis, hurricanes, etc) as violent and often destructive phenomena triggered
by dynamic geological processes. Emphasis on the inter-
relationship among hazards and human role in them.
Students may receive credit for only one of EES-110, 111, 113. 4 credits.

201 Introduction to Geographic Information Systems
Introduction to use of geographic information system analysis to enhance geographic pattern and relationship recognition in geo-spatial data. Data collection and data quality. Data transformation and linkages. GIS modeling. 4 credits.

210 Surficial Processes
Prerequisite: EES-110, 111, 112, or 113
Introduction to the physical and chemical processes and their mechanics that operate within the Earth’s surficial systems to govern landform development. Includes quantitative analysis of geomorphic data in an interdisciplinary context, with emphasis on the interpretation of process. 4 credits.

218 Plate Tectonics and Earthquakes
Prerequisite: EES-110, 111, 112, or 113
History, theory, and application of the plate tectonic paradigm to ancient and modern earthquake activity and contemporaneous crustal instability. Case studies of modern earthquake activity, paleoseismicity, and prediction. 4 credits.

220 Mineralogy and Petrology I
Prerequisite: EES-110, 111, 112, 113 or 215
Introduction to minerals as basic Earth materials in terms of their physical and chemical properties, use, environmental importance and stability, including their identification in hand specimen. Investigation of mineral assemblages found in igneous, metamorphic and sedimentary rocks in order to understand their origin, evolution and use. Field trips required. Should be enrolled with CHM-110. 4 credits.

221 Mineralogy and Petrology II
Prerequisite: EES-220
Advanced study of minerals with emphasis on the crystallography, crystal chemistry and optical properties of silicate minerals. Advanced study of igneous and metamorphic rocks with emphasis on the integration of field, geochemical and optical techniques to determine their conditions of formation and evolution. Field trips required. Should be enrolled with CHM-210. 4 credits.

230 Watershed Hydrology
Prerequisite: EES-110, 111, 112, 113, BIO-111, or CHM-110
Study of the basic hydrologic concepts, the role of energy and biology in the hydrologic cycle, climate and precipitation, natural and anthropogenic inputs to water quality, and the concept of the watershed with emphasis on morphology, management and watershed functions. 4 credits.

301 Remote Sensing of the Environment
The theory and application of remote sensing studies as a tool for environmental management. Topics include the fundamentals of electromagnetic radiation, different methods of remote sensing, platforms and sensor technology, visual image interpretation, and digital image processing. 4 credits.

310 Sedimentary Systems
Prerequisite: EES-220
Principles of sedimentology, sedimentary processes, and depositional environments. Description, classification, and interpretation of sedimentary rocks. 4 credits.

325 Structural Geology
Prerequisite: EES-220

330 Hydrogeology
Prerequisite: EES-110, 111, 112, or 113
Study of the hydrologic cycle, groundwater system, principles of groundwater flow, groundwater quality, monitoring and management techniques, computer modeling techniques. 4 credits.

343 Environmental Systems
GER: NE (Humans and the Natural Environment)
Prerequisite: BIO-111, CHM-110, EES-110, EES-111, EES-112 or EES-113
Same as BIO-343. Interdisciplinary examination of the physical, biological and chemical processes that control the flow of matter and energy in surface environments on planet Earth. Emphasis on the interactions between abiotic and biotic processes. Lab includes field studies and weekend trips. 4 credits.

345 Resilience and Adaptation
Prerequisite: EES-110, 111, 112, 113 or SUS-120
How social change shapes the environment and how environmental change shapes society. “Adaptation” and “vulnerability” concepts compared and contrasted through social-ecological resilience and political ecology approaches. Case studies from the developed and developing world will illustrate the utility of these concepts for pressing environmental issues such as global climate change. 4 credits.

350 Field Study of Regional Geology
Prerequisite: EES-325
Field examination of lithologic and structural relationships and ore deposits to demonstrate the geologic history of a specific region of North America. Normally offered as a summer session course, which includes a two- to three-week field trip to the region being studied. 4 credits.
351 Field Studies in Appalachian Geology
Field study of the geologic development of the Appalachian Mountains, from the viewpoint of Cenozoic geomorphology, Precambrian through Mesozoic stratigraphy, plutonism, metamorphism, and plate tectonic development. Field data collection and interpretation. May Experience ONLY. 2 credits.

352 Field Studies in Iceland
Field study of modern tectonic, volcanic and glacial processes in Iceland, an active part of the Atlantic mid-ocean ridge and hotspot system. Consideration of impacts of climate change on glacial processes. May Experience ONLY. 2 credits.

353 Sustainable Fiji
Examining and exploring the environmental, social, and economic sustainability of eco-tourism in Fiji. Students will visit and assess numerous eco-tourist destinations within Fiji, with a particular emphasis on understanding the impact of humans and tourism on the local natural environment and culture. May Experience ONLY. 2 credits.

354 Field Studies in the Sierra Nevadas
A multi-disciplinary field study of the Sierra Nevada Mountains focusing on geology, ecology, conservation, the work and writings of John Muir, wilderness education and medicine, and human modification of the environment. Field data collection, interpretation, and reflection. May Experience ONLY. 2 credits.

355 Field Studies in the Tanzania
This field based course offers an interdisciplinary study of the interrelationships between people, geology, ecology, and natural resource management in Tanzania. Emphasis on issues related to livelihood security, economic development of wildlife, and coastal/marine conservation. May Experience ONLY. 2 credits.

360 Geology and Sustainability of India
GER: NW (Empirical Study of the Natural World) and NE (Humans and the Natural Environment)
Examining the interactions between climate, geology, and population of India from an Earth Systems approach. Emphasis on landscape changes, pressures on natural resources such as air, water, soil, forest ecosystems, population growth, natural hazards, and sustainability. 4 credits.

402 Geochemistry
Prerequisite: EES-220
Distribution of the elements and geochemical evolution of the earth and solar system. Isotope geochemistry. Chemical equilibrium in igneous, metamorphic, and sedimentary environments. Application of thermodynamics to geologic systems. 4 credits.

410 Atmosphere, Ocean, and Climate Dynamics
Prerequisites: EES-110, 111, 112, or 113
This course is an introduction to the understanding of physics that govern the large scale circulations of the ocean and the atmosphere and its connection to the global climate. Emphasis will be on ocean-atmosphere interaction, energy transfer, climate changes and human impacts. 4 credits.

421 Ore Deposits
Prerequisite: EES-220
Mineralogy, geochemistry and geologic associations of ore deposits. Geochemical and geophysical methods of exploration. Ore minerals in hand specimen and polished section. Several field trips. 4 credits.

425 Regional Tectonics
Prerequisite: EES-325
Emphasis on the history of the tectonic development of North America as demonstrated by structure and stratigraphy. 4 credits.

430 Engineering Geology
Prerequisite: EES-325
Theory and applied aspects of engineering geology; rock strength, soil mechanics, and slope stability studies; geophysical methods and remote sensing techniques as applied to problems in geological engineering. 4 credits.

472 Research and Analysis
Prerequisites: EES-110, 111, 112, or 113
Analysis of data, reading of scientific literature relevant to individual research, and writing of a thesis based on the results of an independent research project. Students must also present results at a professional meeting and to the department. 4 credits.

475 Seminar in Earth and Environmental Sciences
4 credits.

502 Independent Research
Original field and/or laboratory research focusing on a topic selected by the student in collaboration with a faculty member. Results of research are reposted in a paper written according to the style and format of professional publications in the Earth and Environmental Sciences. The grade will depend largely on the initiative of the student. Variable credit.

504 Directed Independent Study
A topic of special interest selected by the student and a faculty member with whom the student chooses to work. The study is done mostly with geologic literature. Results of the investigation are reported in a paper written according to the style and format of professional geologic publications. The grade will depend largely on the initiative of the student. Variable credit.
Sustainability Science (SUS) Courses

120 Principles of Sustainability Science
GER: NWL (Empirical Study of the Natural World with laboratory) and NE (Humans and the Natural Environment)
Introduction to the concepts of sustainability science and the complex problems associated with sustainability. In particular, students will examine the challenge of supporting nine billion people without destroying the planetary resource base, social cohesion, and integrity of the individual. Labs will cover introduction to methods in sustainability. 4 credits.

240 Human Systems
Prerequisite: SUS-120
Exploration of the effects of human activities, consumption patterns and the complexity of human behavior on sustainable development. Application of the science of human behavior to complex problems such as sustainable consumption, human health, poverty, equity, and food security. 4 credits.

241 Social Systems
Prerequisite: SUS-120
An overview of how comparative cultures conceptualize sustainability and the ways in which the actors, institutions, and policies at all scales (e.g., local, regional, national) shape societal well-being. Connections to the global environmental and human systems are emphasized and explored. 4 credits.

242 Dynamic Systems Modeling
Prerequisite: EES-110, 112, 113, or SUS-120
An introduction to systems thinking and modeling of the human-environment relationship. Stocks, flows, feedback loops, homeostasis, and cyclic processes will be considered. Problems in sustainability such as climate change, population growth, and energy consumption will be modeled. 4 credits.

472 Research and Analysis
Same as EES-472. Analysis of data, reading of scientific literature relevant to individual research, and writing of a thesis based on the results of an independent research project. Students must also present results at a professional meeting and to the department. 4 credits.

502 Independent Research
Original field and/or laboratory research focusing on a topic selected by the student in collaboration with a faculty member. Results of research are reposted in a paper written according to the style and format of professional publications in the Earth and Environmental Sciences. The grade will depend largely on the initiative of the student. Variable credit.

504 Directed Independent Study
A topic of special interest selected by the student and a faculty member with whom the student chooses to work. The study is done mostly with geologic literature. Results of the investigation are reported in a paper written according to the style and format of professional geologic publications. The grade will depend largely on the initiative of the student. Variable credit.
Economics

Professors: Brown, Horney, Khandke, Peterson (Chair), Roe, Yankow  
Assistant Professors: Cook, Cozad, Hennessey, Jones  
Lecturer: Arden  
Adjunct: Colvin

The department offers a major in economics and in conjunction with Mathematics, an interdisciplinary major in mathematics-economics.

Economics Major

To graduate with a major in economics, a student must have at least a 2.00 grade point average for all economics courses used to satisfy the major requirements.

A major must include:

- ACC-111,
- ECN-111, 225, 475, and
- ECN-331, 345 and 346 completed on-campus, and
- MTH-141 or 150, and
- at least three more economics courses numbered 201 or greater, excluding ECN-503.

Mathematics-Economics Major

To graduate with a major in mathematics-economics, a student must have at least a 2.00 grade point average for all economics courses used to satisfy major requirements and at least a 2.00 grade point average for all mathematics courses attempted (excluding MTH-110, 241, 301, and 302).

A major must include:

- ECN-111, 475, and
- ECN-331, 345 and 346 completed on-campus, and
- at least one more economics course numbered 201 or greater, excluding ECN-225 and 503,
- MTH-151, 160, 250, 340 and 341, and at least one more course from the following: MTH-235, 255, 260, 360, 335, or 450.

Mathematics-economics majors are also advised to enroll in CSC-121 and 465.

Economics (ECN) Courses

100  Personal Finance  
Prerequisite: junior or senior class standing  
Consideration of personal income, expenditures, borrowing, savings and investments. May not fulfill a major requirement for majors offered within Economics. 4 credits.

105  Exploring Economics with Song Lyric  
Introductory exploration of economic concepts and ideas such as poverty, conspicuous consumption, money and wealth, taxes, through song lyrics. The course will require students to explore genres of music including folk, country, rock ‘n’ roll, hip-hop, that make reference to the economy or economic theories and ideas. Emphasis of the course is on in-class presentations, library research of economic concepts, and writing assignments that capture the nexus between chosen lyrics/songs and economic ideas and theories. May Experience ONLY. 2 credits.

111  Introduction to Economics  
GER: HB (Empirical Study of Human Behavior)  
Introduction to the essential concepts of economic analysis and implications for public policy. Emphasis on examining the operation of markets in both a macro and micro setting. Topics include: inflation, unemployment and monetary policy as well as consumer behavior, the operation of business firms, and supply and demand. Offerings at other institutions are not typically considered equivalent to this course unless they provide thorough coverage of topics introduced in both macro and microeconomics. 4 credits.

200  Federal Reserve and Monetary Policy  
Prerequisite: ECN-111  
An examination of the Federal Reserve system and its important role in the conduct of monetary policy. Emphasis is placed on the collection and interpretation of current economic indicators and how the Federal Reserve might respond to the existing economic situation. Course material will prepare students to participate in the Fed Challenge. May Experience ONLY. 2 credits.

224  Law and Economics  
Prerequisite: ECN-111  
Exploration of the field of law and economics using standard microeconomic tools to examine torts, contract law, property law, and the theory and empirical evidence on criminal behavior. 4 credits.

225  Statistics  
GER: MR (Mathematics & Formal Reasoning)  
Introduction to applied probability and statistics. Topics include: tabular and graphical presentation of data; descriptive measures of central tendency, dispersion, and location; probability and probability distributions (discrete
and continuous); inferential statistics and hypothesis testing; bivariate analysis (qualitative and quantitative), including crosstabulation, covariance, correlation, and simple linear regression. Offerings at other institutions are not typically considered equivalent to this course. Students must pass an examination administered by the department to establish course equivalency. Students cannot receive credit for this course and MTH-241. 4 credits.

233 Economics of Gender
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Examination of the significance of gender differences in the U.S. economy. Topics include: differences in earnings and occupational choice, discrimination, consequences of women’s employment for the family, and the feminization of poverty. 4 credits.

234 Urban Economics
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Survey of economic analysis in its application to urban problems, development patterns, land markets, and labor markets. Causal factors creating urban dilemmas and the policy alternatives available for improving the quality of urban life are considered. Exploration of the effects of environmental, social and political forces on the urban economy and urban life. 4 credits.

235 Population, Economy, and Society
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111 or SOC-101 or 102
Same as SOC-221. Explores the trends and determinants of vital events such as fertility, mortality, marriage, divorce, and migration from sociological and economic perspectives. Presents a brief history of world population change and explores current trends and the theories that are used to understand them. A student cannot receive credit for both ECN-235 and SOC-222. 4 credits.

236 Economics of the Environment
GER: HB (Empirical Study of Human Behavior) and NE (Humans & the Natural Environment)
Prerequisite: ECN-111
Developing the economic tools that are needed to understand the economic basis of environmental problems and evaluate the policies that are intended to reduce environmental degradation. 4 credits.

237 Economics of Poverty and Inequality
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Examination of the issues of income inequality and economic poverty in modern America. Topics include: theories of poverty and income distribution; statistical measurement of poverty and inequality; poverty trends among important racial and demographic groups; public policy initiatives. 4 credits.

238 Public Finance
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Microeconomic analysis of government expenditure and tax policies, with attention to social security, national health insurance, welfare programs, individual income tax and other current topics. 4 credits.

241 Money and Banking
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Institutional and historical study of the nation’s monetary system, including definition of money, an overview of the financial markets, activities of the banking system, non-bank intermediaries, and central banking. Analysis of effects of money and finance on output, prices, and economic growth. 4 credits.

242 Health Economics
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Using tools of economics to examine the health services industry. Influences of government on supply and demand for services and development of private and public insurance products are examined, as are interactions among medical technology, demand, and insurance. Additional topics include: managed care, international comparisons, and current reform proposals 4 credits.

243 Economic Growth and Development
GER: WC (World Cultures)
Prerequisite: ECN-111
The theory of economic development, the historical development experiences of Western, Asian, and African nations, the problem of accelerating rates of development of less advanced nations, and the problem of maintaining economic growth rates of advanced nations. 4 credits.

247 History of Economic Thought
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Development of economic thought from pre-classical writers through Adam Smith, the classical economists, socialist, marginalist, neoclassical and institutional writers to the present. 4 credits.

248 Government and Business
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Evolution of governmental involvement in the U.S. economy. Special emphasis on the relationship between government and the business community; the structure, behavior and performance of the business community which have induced government response; the interpretation and application of antitrust law; and a brief survey of public utilities and transportation economics. 4 credits.
249  Asian Economics
GER: HB (Empirical Study of Human Behavior) and WC (World Cultures)
Prerequisite: ECN-111
Examination of the development records of Asian economies, notably Japan, South Korea, Taiwan, Hong Kong and Singapore. Some attention directed to the newly emerging economies of Malaysia, Thailand, Indonesia, China and India. A broad economic perspective and simple economic models are used to examine institutional changes, industrial policies and the role of government and the private sector in these economies. 4 credits.

250  Labor Economics
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
The study of labor markets from both the firms’ and workers’ perspectives. Trends and relationships pertaining to the gender, race, age and educational composition of the workforce are discussed, as are worker mobility training and productivity. Major policies that affect labor markets (e.g., minimum wage, social security) are also examined. 4 credits.

251  Economics of China
GER: HB (Empirical Study of Human Behavior) and WC (World Cultures)
Prerequisite: ECN-111
Examining the causes and effects of economic development and structural reforms of the fastest-growing and largest developing country: China. Emphasis on a political economy approach due to the state dominance in the Chinese economy. 4 credits.

252  International Trade Theory and Policy
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
Introduction to international trade theory and policy. A microeconomic perspective of trade models detailing causes and benefits of trade between nations. Consideration of relationship between trade and economic growth and development. Discussion and examination of the effects of exchange rates in trade, roles of trade institutions and the political economy of trade agreements. 4 credits.

253  International Macroeconomic Theory and Policy
GER: HB (Empirical Study of Human Behavior)
Prerequisite: ECN-111
An introduction to international macroeconomic theory and policy. Topics covered include exchange rates, balance of payments, and interest rates. Stabilization policy in the open economy, currency crises, and monetary integration will also be explored. 4 credits.

256  Economics of Strategy
Prerequisite: ECN-111
A study of economic forces that shape companies and the industries and markets in which corporations (or lines of businesses) operate. Topics include: understanding the origins of competitive advantage and how to sustain it; assessing entry and exit conditions of a market; conducting industry and competitive analyses; determining the boundaries of the corporation; and assessing how these boundaries are changed under conditions of advancing technology. 4 credits.

263  Issues in African Economic Development
GER: HB (Empirical Study of Human Behavior) and WC (World Cultures)
Prerequisite: ECN-111
Examination of issues in development economics as they relate to Sub-Saharan Africa. Topics will include macroeconomic issues (e.g. macroeconomic determinants of growth, saving and investment) and microeconomic issues (e.g. human capital, land tenure rights), domestic issues (e.g. governance, inequality) and international issues (e.g. international trade, international finance, international organizations). 4 credits.

331  Empirical Methods in Economics
Prerequisite: ECN-111, MTH-141 or 150, and ECN-225 or MTH-241 or 340
Introduction to the methods of preparing and analyzing data for economic research. Students become familiar with the basic empirical methods used by economists, particularly regression analysis. Computer software packages used extensively. 4 credits.

345  Intermediate Macroeconomic Analysis
Prerequisite: ECN-111, MTH-141 or 150, and any other economics course numbered 201 or greater, excluding ECN-225 and 503
Focuses on short and long run macroeconomic models. Analysis of monetary and fiscal policies and their effectiveness in targeting aggregate measures of unemployment and inflation under closed and open economy regimes. 4 credits.

346  Intermediate Microeconomic Analysis
Prerequisite: ECN-111, MTH-141 or 150, and any other economics course numbered 201 or greater, excluding ECN-225 and 503
Operation of the price system and its role in understanding the behavior of individual economic units: consumers, producers, and suppliers of resources. Applications of price theory to contemporary microeconomic problems. 4 credits.

357  Quantitative Methods for Business and Economics
Prerequisite: ECN-111 and MTH-141 or 150
Mathematical operations and methodology within the context of market models, models of the firm, national income models, and models of economic growth;
introduction to mathematical economics, static analysis, comparative statistics, optimization problems, dynamic analysis, and linear programming and game theory. 4 credits.

371  Economic and Political Analysis of the European Union
Prerequisite: ECN-111
Same as PSC-240. An examination of the formation, implementation and operation of the European Union, with special emphasis on political and economic issues. Taught as part of the Furman program in Europe. Students may not receive credit for both ECN-371 and PSC-240. 4 credits.

475  Senior Seminar in Economics
Prerequisite: ECN-331, 345 and 346
Capstone course for economics majors. Reading and analysis of selected topics. Research, data analysis and writing of selected topics. Students will present their research in class. 4 credits.

501  Independent Study
Variable credit.

503  Individualized Internship
Prerequisite: ECN-111, one additional course in economics numbered 201 or greater, excluding ECN-225, and instructor permission.
In consultation with an economics faculty sponsor, students develop internships, identify objectives, read literature, complete a writing assignments related to their internship, and submit reflective summaries of their activities. This course MUST be enrolled pass-no pass and will not contribute to the economics or mathematics-economics major. Variable credit.

Education
Professors: Heath, Hecker (Chair), Henderson, Quast, Ritter
Associate Professors: Bidjerano, DeJong, Lipscomb, Stuart, Svec, Thomas
Assistant Professors: Stover
Clinical Faculty: Cantrell, McDowell
Director of Graduate Studies: Terry
Adjuncts: P. Harris, R. Moore, Muller, Riddle
Director of Teaching Fellows: K. Allen

The Education Department offers a major in Education (grades 2-6), preparation for certification in grades 2-6, and preparation for certification in an approved academic discipline for grades 9-12 or PK-12.

Teacher Education Program
Program Accreditation and Institutional Report Card

As a university preparing students for careers in public education and related professions, Furman is subject to regulations and guidelines established and implemented by the United States Department of Education, the South Carolina Board of Education and the National Council for Accreditation of Teacher Education (NCATE). Furman meets the national and state standards for “program approval” status. Students who satisfactorily complete the requirements for certification become eligible for a teaching certificate in South Carolina and other states with reciprocal arrangements. In efforts to continually renew and improve teacher education, regulations and standards governing teacher preparation programs periodically change, and the programs of students admitted into the Teacher Education program are subject to those changes.

Vision Statement

The Teacher Education program at Furman prepares educators who are scholars and leaders.
Mission of the Program

Furman University prepares teachers and administrators to be scholars and leaders who use effective pedagogy, reflect critically on the practice of teaching, promote human dignity, and exemplify ethical and democratic principles in their practice. Furman is committed to a program of teacher education that calls for collaborative, interdependent efforts throughout the academic learning community.

The Teacher Education program is anchored in the university’s commitment to the liberal arts—encompassing the humanities, fine arts, mathematics, and social and natural sciences as the essential foundation for developing intellectually competent educators. Furthermore, candidates develop professional content knowledge, pedagogical skills, and dispositions through:

- mastery of subject matter
- understanding of philosophical, historical, sociological, and political foundations of education
- understanding of human development and its implications for learning
- understanding of social and cultural relationships
- understanding the interrelationship of curriculum, instruction, and assessment
- practice of critical inquiry and reflection on teaching and learning
- opportunities for leadership development
- opportunities to study and practice effective communication
- collaboration with peers and others

Certification Options

The Teacher Education Program at Furman satisfies certification designations stipulated by the South Carolina Board of Education. At Furman University, teaching certification programs are offered in the following areas:

- Elementary Education (2-6)
- Languages – French, Latin, Spanish (PK-12)
- Music (PK-12)
- Biology, Chemistry, English, Mathematics, Physics, Social Studies (9-12)

Additional areas of certification available on the graduate level include:

- Early Childhood Education (PK-3)
- English for Speakers of Other Languages (PK-12)
- Literacy (PK-12)
- Special Education (PK-12)

For purposes of the Institutional Report Card, “program completers” are candidates who satisfactorily complete the requirements of the major in Education or in another approved academic discipline for grades 2-6, PK-12, or 9-12, as specified by Furman’s Teacher Education Program. The Music Education certification program may be completed within the four year undergraduate baccalaureate program. All other programs for teaching certification must be completed on a post-baccalaureate basis. This means the teacher candidate will graduate after four years with a baccalaureate degree in the major. Completion of the Teaching Internship (EDEP-670) occurs on the graduate level during the fall semester of the following year. Graduate credits accrued during the post-baccalaureate year may be applied toward a master’s degree.

Candidates are required to pass the Praxis II, Subject Assessments/Specialty Tests and Principles of Learning and Teaching Tests (PLT), administered by the Educational Testing Service. Passing scores must be on file at Furman before a recommendation for a teaching certificate can be made.

Admission and Performance Assessment

For purposes of gauging the entrance level and continued growth of candidates toward proficiency in the knowledge, skills and dispositions espoused by the Teacher Education program, a system of periodic performance assessments is used, the first of which is the formal application for admission to the program. The performance assessments are described in
Continuation in the Teacher Education program is based on periodic performance assessments. The faculty has the responsibility to both the public and the profession to award a degree or certificate only when the candidate has demonstrated a satisfactory level of professional knowledge, skills, and dispositions as judged by the program faculty. Further, candidates must exhibit integrity and character consistent with the Standards of Conduct for South Carolina Educators as set forth by the South Carolina Department of Education and the standards of ethical principles established by appropriate professional associations. See the Teacher Education program guide for more information.

**Education Major with Certification for Teaching**

The education major with certification consists of the following courses:
- EDU-001, 111, 120, 221, 330, 331, 332, 333, 430, 431, 432 and 470,
- HSC-251,
- IDS-230,
- MTH-301 and 302,
- ART-240, MUS-430, or THA-440, and
- BIO-101, 102 or 111 and CHM-111, EES-110, 111, 112, 215, PHY-105 or 111.

Early Teaching Experience: In August, prior to the senior year, all candidates seeking certification participate in an early teaching experience on a full-time basis. This experience provides an opportunity for direct involvement in the opening of school when classroom routines and procedures are established. Candidates seeking certification are expected to assume some teaching responsibilities.

Senior Block: During the spring of the senior year, majors enroll in four courses that are team-taught by Education faculty in one block: EDU-430, 431, 432 and 470.
Education Major without Certification as Preparation for Non-Teaching Fields

Students who seek non-teaching careers related to the education of children and youth (e.g., child life, camps, religious education) may choose to major in Education without completing the certification program. As part of the application for admission to the Education major for non-teaching fields, students write a letter to the department chair indicating why the non-teaching major is necessary to achieve their career or educational goals involving work with children and youth. The letter should include a description of the procedure followed to investigate the proposed focus of study and a tentative list of courses to be included in the program. EDU-001, 111, 120 and 221 are required. A minimum requirement of five additional professional education courses and any other courses that fit the career or graduate study goals of the student will be determined, under the advisement of the department chair and with the approval of the Education faculty.

Certification for Teaching in Other Subject Areas

Students wishing to pursue teaching certification in grades 9-12 or PK-12 certification in Music or Languages complete majors in those academic disciplines. Additionally, they enroll in a series of pre-professional courses through Education. Please refer to the appropriate departmental sections of this catalog for additional information.

Students seeking secondary teaching certification in non-science disciplines (English, Mathematics, or Social Studies) or Languages (grades PK-12) must complete two science courses with one having a lab experience. Students seeking certification in Music (grades PK-12) must complete one science course with a laboratory component.

Early Teaching Experience: In August, prior to the senior year, all candidates seeking certification participate in an early teaching experience on a full-time basis. This experience provides an opportunity for direct involvement in the opening of school, when classroom routines and procedures are established. Candidates seeking certification are expected to assume some teaching responsibilities.

Senior Block: Spring semester senior year, students who pursue certification in grades 9-12 and languages PK-12 enroll in EDU-350 (ED-50), 460, 472 (56), and one subject-specific methods course (EDU-452, 453, 454, 455, MLL-450, or LTN-450).

Master of Arts

Please see the graduate studies website at www.furman.edu/gradstudies for complete information about pursuing coursework beyond the award of a bachelor’s degree.

Education (EDU) Courses

001 Education Laboratory I
For students and prospective teachers exploring education as a career possibility. Observations in different school settings for the purpose of becoming acquainted with the school and with the classroom. Must be enrolled with EDU-111. 0 credit.

005 Teaching Fellows Seminar
Discussion of works by recognized scholars and study current trends and issues in education. Discussions highlight interactions with children and youth and/or visits from recognized professionals in the field. Must enroll every semester while participating in the scholarship program. 0 credit.

111 Perspectives on American Education
GER: HB (Empirical Study of Human Behavior)
Introduction to teachers and teaching, the American school in an increasingly diverse society, and the historical, sociological and philosophical foundations of education. Must also enroll in EDU-001. 4 credits.

115 Depiction of Schools on Film
Investigation of documentary films as social and political texts in order to identify historical and contemporary views on schools and the purpose(s) of education. May Experience ONLY. 2 credits.

120 Human Growth and Development
GER: HB (Empirical Study of Human Behavior)
Physical, cognitive, social and emotional aspects of development, from conception through older adulthood, with applications for parenting and teacher education.
Students may not receive credit for both EDU-120 and PSY-211. PSY-211 cannot be applied to the education major. 4 credits.

210  K-12 Curriculum Through Service Learning
Prerequisite: Admission to the teacher education program. An introduction to service learning, with a focus on infusing this instructional strategy into the classroom curriculum. Begin developing a service learning plan to be implemented during their internship or later in their own classrooms. 1 credit.

211  Discipline and Classroom Management
Develop knowledge and application of skills necessary for designing a classroom ecology that facilitates effective teaching and learning. Topics include problem solving in the classroom, motivational strategies for acceptance of responsibility, positive instructional approaches, and foundations for better understanding of children and youth. 1 credit.

221  Education of Students with Exceptionalities
Prerequisite: EDU-111 and 120
Characteristics of persons with exceptionalities, implications for teaching and learning, and applications of special education procedures and services. Extensive field experiences are incorporated. 4 credits.

222  Nature of Learning Disabilities
Prerequisite: EDU-221
Designed to teach students the history of the field of learning disabilities, related educational theories, available educational services, and appropriate strategies for working with individuals with learning disabilities. Field-based experiences are incorporated. 4 credits.

223  Nature of Emotional/Behavioral Disorders
Prerequisite: EDU-221
Study of individuals with emotional/behavioral disorders, major theoretical perspectives, and current issues and research. Factors which interrelate with emotional/behavioral disorders (community, school, family) are considered, and appropriate intervention strategies are studied. Field-based mental retardation, etiology, identification and placement, and current trends. Field-based experiences are incorporated. 4 credits.

225  Teaching and Learning: The Early Primary Years
Prerequisite: EDU-111, 120 and 330
Introduction to the field of early childhood education. Focus on the development of children ages 5-8 and the design of learning environments, including curriculum and instruction, that foster optimal growth and development. Students are expected to participate in field work in a kindergarten classroom. 4 credits.

233  Science Inquiry Skills for Grades K-8
A laboratory course designed to develop inquiry skills such as observation, measurement, communication and investigation design. May Experience ONLY. 2 credits.

234  Learning With and About Senior Citizens
Issues in aging and adult development are examined through study and intergenerational dialogue. Includes daily readings and interactions with senior citizens and includes engagement with professionals and agencies in the Greenville community whose products and services directly serve those of aging and older adults. May Experience ONLY. 2 credits.

260  What Makes a Great Teacher
An examination of teachers in challenging work conditions with a focus on what factors make a teacher “great.” Particular attention will be paid to teachers working with students living in poverty. May Experience ONLY. 2 credits.

265  International Perspectives on Public Education
In-depth focus on the issues, philosophy, history, and cultural differences of public education from an international perspective. Comparison of the educational system in the United States with other nations, focusing on the country visited. May be repeated once with change of country. May Experience ONLY. 2 credits.

330  Reading and Writing Processes and Instruction in Grades PK-3
Prerequisite: EDU-111 and 120
Study of early literacy reading and writing instruction and the role of the teacher as a decision-maker. Content will focus on integrating reading, writing, speaking, and listening processes across the curriculum. Major emphasis will be placed on children’s literature and its effective presentation in the classroom. 4 credits.

331  Reading and Writing Processes and Instruction in Grades 2-6
Prerequisite: EDU-111 and 120
Reading and writing instruction in the elementary grades emphasizing the development of critical thinking and metacognitive skills. Content will focus on integrating communication processes in the content areas; children’s literature and its effective presentation in the classroom; and the role of the teacher as a reflective practitioner. 4 credits.

332  Social Studies in Grades PK-6
Prerequisite: EDU-111 and 120
Knowledge of the elementary and middle school social studies curriculum, teaching strategies and materials, and field-based application in area schools. 4 credits.
333 Science in Grades PK-6  
Prerequisite: EDU-111 and 120  
Knowledge of the elementary and middle school science curriculum, teaching strategies and materials, and field-based application in area schools.  4 credits.

335 Organization and Curriculum in the Middle School  
Prerequisite: EDU-221  
Developmental tasks of middle school students; organization and sequence of the instructional program; staff characteristics, patterns, services, home-school-community relations; management and evaluation of middle schools.  4 credits.

336 Teaching Reading in the Content Areas  
Prerequisite: EDU-221  
Designed for prospective and practicing school teachers, with practical suggestions for the reading specialist and the content teacher.  4 credits.

338 Reading and Responding to Children’s Literature  
Exploration of a wide variety of genres of children’s literature to become more knowledgeable in the ability to select, read, and respond to children’s literature. Development of expertise in using children’s literature for aesthetic, personal, social, and critical purposes, and examination of the ways readers interact with texts and each other to make meaning while reading and discussing texts.  May Experience ONLY.  2 credits.

350 Curriculum and Methods of Teaching in Grades 9-12  
Prerequisite: EDU-221  
Various ways of organizing the curriculum in the secondary school, a comparison of traditional and nontraditional teaching methods, principles of learning, classroom organization, planning units and formal and informal evaluation. Should be enrolled spring semester of the senior year concurrently with the appropriate subject specific methods course.  4 credits.

430 Assessment for Instructional Planning  
Introduction to the processes of assessment and the use of assessment information to develop appropriate educational programs for all students in grades PK-6. Emphasis on formal, informal and authentic assessment measures and their use to plan appropriate instruction that affects teaching and learning. May only be enrolled as a part of the Senior Block.  4 credits.

431 Diverse School Cultures  
Deepens understanding of diversity in elementary and middle school cultures. Classroom and school communities that embrace diversity studied through analysis of attributes and practices of successful educators. Instructional and management strategies that encourage learning, sensitivity and socialization developed through integrated clinical and field experiences. May only be enrolled as a part of the Senior Block.  4 credits.

432 Integrating Curriculum and Technology in Grades PK-8  
Provides background for integrating instruction and technology across curriculum. In field-based teams, candidates explore models/theories of curriculum integration and use the thematic approach to unit development. Focus on developing connections across disciplines of science, social studies, mathematics, language arts, and related arts. May only be enrolled as a part of the Senior Block.  4 credits.

451 Literature for Young Adults  
Prerequisite: EDU-221  
Content of the literature program in the secondary school and methods of teaching poetry, short stories, traditional literature and young adult novels.  4 credits.

452 Teaching English in Grades 9-12  
Prerequisite: EDU-221  
Explores two of the major components in the secondary school English curriculum: language and composition. Emphasis placed on teaching the writing process. Examines strategies needed to learn from text materials included in the English classroom. Should be enrolled senior year concurrently with EDU-350 (ED-50).  4 credits.

453 Teaching Social Studies in Grades 9-12  
Prerequisite: EDU-221  
Provides in-depth investigation of the methods associated with teaching social studies on the secondary level. Special emphasis placed on how the social sciences differ from other disciplines, and how differences affect curricular and pedagogical strategies. Should be enrolled senior year concurrently with EDU-350.  4 credits.

454 Teaching Science in Grades 9-12  
Prerequisite: EDU-221  
Teacher candidates become reflective practitioners developing and delivering quality science curriculum. Covered are laboratory safety, instructional strategies, inquiry learning and the learning cycle, curriculum models emphasizing integration, performance assessment, resource evaluation focusing on technology, and field experiences in area schools. Should be enrolled senior year concurrently with EDU-350.  4 credits.

455 Teaching Mathematics in Grades 9-12  
Prerequisite: EDU-221 and MTH-160 or 360  
Teacher candidates become reflective practitioners in the development and delivery of a well-designed standards-based mathematics curriculum. Topics include mathematics
curriculum in the secondary school, instructional strategies, performance assessment and resource evaluation focusing on technology. Students are expected to participate in field work in local mathematics classrooms. Should be enrolled senior year concurrently with EDU-350. 4 credits.

460 Critical Issues in Secondary Education
Designed for senior level secondary and PK-12 language teacher candidates in conjunction with EDU-350, 472, and an appropriate subject-specific methods course. Provides candidates with opportunities to examine significant issues in secondary schools including: classroom management techniques, reading and writing in the content area, and educational technology. 4 credits.

464 Critique of Science Education
Examines selected topics in the methodological and philosophical foundations of science education. Topics include nature of science inquiry, context of science, nature of learner, teaching and learning, curriculum, student assessment, and professional practice. 4 credits.

465 Informal Science Education Practicum
Prerequisite: EDU-464
Provides students opportunity to apply theory and evidence-based practices in informal learning settings such as museums, zoos, aquariums, or state parks under the supervision of faculty. 4 credits.

470 Practicum in Teaching
Designed for senior level teacher candidates. Provides opportunities to apply theory and evidence-based practice in the classroom under the supervision of Furman faculty and mentorship of master teacher. May only be enrolled as a part of the Senior Block. 4 credits.

472 Practicum: Secondary Teaching
Provides candidates with opportunities to apply theory and evidence-based practice in the classroom under the supervision of Furman faculty and mentorship of a master teacher. May only be enrolled as a part of the Senior Block. 4 credits.

501 Independent Study
A project whose objectives and activities are designed by the student, approved by a faculty member who directs the project and by the department chair, and evaluated by a committee of three department members. Variable credit.

503 Non-Teaching Internship
4 credits.

505 Teaching Internship
Prerequisite: completion of major requirements in music education
Required of candidates intending to teach. Intern is placed with a mentor teacher in the subject area of prospective certification. Full-time teaching responsibilities assumed over time. Intern attends weekly seminars. 16 credits.

Geography (GGY) Courses

230 Principles of Geography
GER: NE (Humans and the Natural Environment)
Regional examination of the complex relationship between humans and the environment in an increasingly globalized world. Focus on interconnections between diverse regions of the world. 4 credits.

265 Geography and Sports
Intersection of geography and sports with particular attention to the increasing globalization of sports worldwide. Focus will be primarily on baseball, basketball, and soccer, but will also explore a number of other modern sports. Cultural impact of modern sports, the diffusion of sport around the world, the economic impact of sports internationally, and struggle in finding spaces for recreational activities. May Experience ONLY. 2 credits.
English

Professors: Aarnes, G. Allen, Menzer, Oakes, Pate, Radel, Shackelford (Chair)
Associate Professors: Bhati, Hausmann
Assistant Professors: Braun, Herron, Kirkpatrick, Olaiya, Provost, Speitz, Tevis
Adjunct: Riddle

To graduate with a major in English, a student must have a grade point average of at least 2.00 in a group of courses that satisfies the departmental requirements.

A major consists of at least ten courses and must include:

- ENG-150 and 475,
- one course focused from Early Traditions: ENG-301, 302, 303, 304, 307 or 311.
- one course from Kinds of Literature: ENG-305, 320, 321, 331, 335, 374, or 422.
- one course from Literature and Global Society: ENG-312, 323, 423, 434, 435, or 454.
- one course from Writers and their Worlds: ENG-306, 332, 403, 404, 412, 418 or 420.
- one course from Theory in Practice: ENG-362, 452, 453, 461, 462, or 471, and
- at least 12 credits in any other ENG courses except ENG-503.

All requests for exceptions to major requirements must be approved by the department.

The department recommends that ENG-150 be completed as early as possible in the major. The successful completion of ENG-111 may contribute only once to requirements for the major. Courses with an ENG-prefix completed during the May Experience or independent studies appropriate to the discipline may also contribute to the major.

Students who plan to pursue a career in teaching must also complete EDU-111, 120, 221, 350, 451, 452, 460, 472, and EDEP-670 in addition to prescribed experiences in the major. The requirements for certification (teaching internship) will be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

Students who intend to pursue graduate study in English should complete more courses than are required for the major and should consult with their advisors about their overall programs.

Special opportunities for experience in journalism are available through work on the staffs of the student literary magazine, newspaper, and yearbook.

Every English course includes instruction and practice in composition.

English (ENG) Courses

111 Texts and Meaning
GER: TA (Critical, Analytical Interpretation of Texts)
An introduction to the study of the structures and methods by which texts create and convey meaning. Although texts and approaches will be determined by the individual instructors, all sections will emphasize reflective, critical reading, as well as text-centered discussions and written assignments. 4 credits.

150 Interpretive Strategies
GER: TA (Critical, Analytical Interpretation of Texts)
The course addresses issues specific to literary and cultural analysis and in the process explores various interpretive strategies through which ideas of the literary and of literary study are engaged. The perspectives examined will vary according to instructor. Students will read primary theoretical texts, and will write about how theories of literature might inform ways of reading prose, poetry, drama, and/or film. 4 credits.

210 Advanced Composition
Prerequisite: any first year writing seminar
Instruction and practice in writing, analyzing, and evaluating narrative, descriptive, expository, and argumentative essays. 4 credits.

211 Professional Communication
Prerequisite: any first year writing seminar
The course refines students’ grammar, mechanics, and style; develops analytical and collaborative skills; introduces the strategies, formats, and organizational patterns of a variety
of professional letters, memos, proposals, and reports; teaches research strategies and techniques; and develops oral and nonverbal communication skills. 4 credits.

212 Journalism: Principles and Practice
Prerequisite: any first year writing seminar
The course addresses the role of newspapers in society, the strategies for reporting and writing news, and the ethical and legal ramifications of newspaper reporting. 4 credits.

213 Investigative Reporting
Completion of an investigative project for publication, including choosing an area of study, interviewing and assembling and retention of pertinent documents. Revelatory reporting will be written, packaged with photographs and graphics and published. May Experience ONLY. 2 credits.

215 Writing for Film and Television
Prerequisite: any first year writing seminar
Conducted as a workshop on how to write feature films and various types of television drama scripts, this course develops skills used in dramatic writing for visual media, with special focus on film and television. 4 credits.

220 Writing Poems
Prerequisite: any first year writing seminar
The course will develop students’ proficiency in the craft of poetry. Students should be eager to write frequently, to read carefully, and to comment thoughtfully upon the work of other poets – including their classmates. 4 credits.

221 Writing Fiction
Prerequisite: any first year writing seminar
The course will develop students’ proficiency in the craft of prose fiction. Students should be eager to write frequently, to read carefully, and to comment thoughtfully upon the stories of other authors – including their classmates. 4 credits.

223 Writing Nonfiction
Prerequisite: any first year writing seminar
This course will develop students’ proficiency in the craft of nonfiction. Students will do writing exercises, discuss published work, explore prose techniques, and critique their classmates’ work. 4 credits.

225 Writing with Writers
Prerequisite: any first year writing seminar
Supervised by a prominent writer, students will work on their own creative projects. The genre (prose fiction, creative nonfiction, poetry) will change from year to year. May Experience ONLY. 2 credits.

227 Making Comics!: Form + Craft = Product
In Making Comics!: Form + Craft = Product, you will do just that; you will make comics. In doing so, you will learn how the peculiar art form of comics (or sequential art, or graphic novel) uses both image and text but ultimately operates in ways that differ from either prose or single-image pieces of art. It is the conjunction of the image and the text that make comics do what they do, so in order to understand that, you will write and you will make the images for at least four book projects. No art or writing pre-requisites are required, though you may be best-served if you have some level of skill in each. The course is not intended to teach you to write or teach you to draw; rather, the intention is to teach you how to combine those two medium for the purpose of dynamic storytelling. May Experience ONLY. 2 credits.

301 Literature of the Later Fourteenth Century
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
Study of literature by the poets and mystics of Ricardian England, with an emphasis on interpreting these texts in light of their medieval social and philosophical context. A substantial part of this course is devoted to Chaucer’s Canterbury Tales. 4 credits.

302 Literature of Early Modern Britain
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
A study of literature written during the reigns of the Tudors and the early Stuart monarchs when England began to develop a distinct cultural identity. Emphasis is on poetry and prose. 4 credits.

303 Early Modern Drama
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
Major works from the golden age of English drama. Shakespeare and/or Shakespeare along with work by his contemporaries, Marlowe, Jonson, Webster, Middleton, Ford, and others. 4 credits.

304 Restoration and Eighteenth-Century English Literature
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
A survey of English literature and culture from the Restoration of Charles II in 1660 to around 1800, covering a wide range of literary genres, such as Restoration drama, satiric poetry, the travel narrative, the periodical essay, and the novel. The course examines the historical, social, political, and intellectual backgrounds for these texts, such as the declining influence of court culture, the construction of a colonial market economy, discourses of slavery and abolition, and the reevaluation of traditional class and gender hierarchies. Authors studied include Rochester, Wycherley, Behn, Haywood, Aubin, Defoe, Pope, Swift, Fielding, Equiano, and others. 4 credits.

305 British Romantic Literature
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
A study of the major writers and some less well-known figures from the period 1790-1830: the poets Blake,
Wordsworth, Coleridge, Byron, P. B. Shelley, and Keats; the novelists Austen and Scott; the essayists Hazlitt, Lamb, and De Quincey; and others, such as Mary Shelley, Godwin, and Clare. Students will also engage the critical writing of the period as well as relevant current critical and theoretical issues. 4 credits.

**306 Victorian Literature and Culture**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
Study of Victorian fiction, poetry, and prose with an emphasis on major social, cultural, and political concerns and debates in nineteenth-century Britain: industrialization and modernization, ideologles of class and gender, evolutionary theory and religious ambivalence, new developments in aesthetic theory and literary form. Authors studied include Carlyle, Ruskin, Dickens, Eliot, Browning, Tennyson, Pater, Morris, and Wilde. 4 credits.

**307 Literature Before Print**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
The course explores the differences between the way medieval people read – their experience of reading and their training as interpreters of texts – and the way we read today, as well as the complexity and variance of texts created in a pre-print world. 4 credits.

**309 Nature in South Asian Literature**  
*GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)*  
**Prerequisite:** any first year writing seminar  
Introduction to the genre of the pastoral as evidenced in writings about South Asia, both by “Western” and “indigenous” authors either visiting or domiciled in the Indian subcontinent. An array of literary texts of different kinds written in different eras will be considered to help students understand the transformations in the genre (including its parody and subversion) in response to cultural and political developments. Secondary texts will also help construct an appropriate interpretive framework for the primary texts. 4 credits.

**310 Studies in Fictional Histories**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
How does literature shape the ways in which one imagines historical figures, national events, or remote geographies? How do partially fictionalized reconstructions of experience influence historical understanding? This course theorizes the often porous borders between history and fiction. Students will examine archival material, historical documents, and theoretical studies alongside fictional works that do not simply reimagine the past but profoundly recast national histories.

**311 Settling: Writing in America to 1830**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
Study of American literature from the colonial period through Cooper, focusing on major works by Franklin, Brown, and Cooper, and considering such forms as the sermon, diary, captivity narrative, and spiritual biography. 4 credits.

**312 Emerson to Dickinson**  
*GER: UQ (Ultimate Questions)*  
**Prerequisite:** any first year writing seminar  
Study of American literature from Emerson through Dickinson, focusing on such writers as Douglass, Poe, Hawthorne, Melville, Thoreau, Stowe, Whitman. Topics include the possibility of living well, relationships to creation, to God, to evil, and to an expanding, divided federation compromised by a constitution that allows slavery and disenfranchises women. 4 credits.

**320 Eighteenth-Century Novel**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
Novels are so familiar that it is hard to believe that there was ever at time when they did not exist. However, in Shakespeare’s day, there was not yet a novel in the modern sense, while a bit over a century later the novel was the most widely-read of non-religious literary forms. In this course we will explore the changes—in literacy, class structure, international relations, gender norms, print culture, language, and religion—that this new genre reflected. Authors covered may include Behn, Manley, Defoe, Haywood, Swift, Lennox, Fielding, Richardson, Collier, Burney, Goldsmith, Radcliffe, and Austen. 4 credits.

**321 Victorian Novel**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
The Victorian novel viewed through the lens of both nineteenth-century and modern theories of the novel. Works by Charles Dickens, George Eliot, Charlotte Bronte, Thomas Hardy and others will be examined from the perspective of Victorian literary culture. The work of critics such as Mikhail Bakhtin, Georg Lukacs, Walter Benjamin, Ian Watt, Fredric Jameson, and Franco Moretti will also be studied. 4 credits.

**322 Modern British Novel: 1900-1960**  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
**Prerequisite:** any first year writing seminar  
Study of the novel in the British Isles and Empire from 1900 to 1960. Focus on realism, modernism, colonialism, war, and social change. Major writers studied include Conrad, Joyce, Woolf, Forster, Lawrence, Durrell, Greene, and Lessing. Readings will include literary history, criticism, and theory of the modern novel. 4 credits.
323  Global Novel since 1960  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The contemporary novel from the British Isles, the  
Caribbean, Canada, Australia, South Asia, and Africa. Focus  
on postmodernism, postcolonialism, and transnationalism  
from 1960 to the present. The writers studied include  
Naipaul, Rushdie, Ondaatje, Emecheta, Gordimer, McEwan,  
Atwood, Carey, and Kincaid. Readings will include theory  
and criticism. 4 credits.

325  Global Issues in Literature  
GER: TA (Critical, Analytical Interpretation of Texts) and  
WC (World Cultures)  
Prerequisite: any first year writing seminar  
Study of postcolonial responses to and re-authoring of  
different Western literary canons, including examples from  
drama, fiction and poetry. Study of literary practices from  
diverse postcolonial locations (Africa and the Caribbean) to  
enable understanding of how through literary adaptations  
and oppositional writings third world writers respond to  
 writings from Europe and America. 4 credits.

331  American Novel from Its Beginnings to World War I  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Examination of the development of the American novel  
through its adaptations of such sub-genres as the Gothic  
novel, the historical romance, the social protest novel,  
the picaresque novel, the realistic novel of manners, and  
the naturalistic novel. Authors might include Cooper,  
Hawthorne, Stowe, James, Twain, Norris, Chopin, and  
Cather. 4 credits.

332  American Novel from World War I to the Present  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: Any first year writing seminar  
Examination of modern and postmodern novels,  
emphasizing how these works reflect cultural assumptions  
about social class, race, ethnicity, gender roles, politics,  
technology, religion, art and entertainment. Authors  
might include Fitzgerald, Hemingway, Faulkner, Hurston,  
Malamud, Kesey, Walker, and Tan. 4 credits.

335  Immersion Journalism  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Study of a fascinating branch of nonfiction writing. Texts  
may include works by Tom Wolfe, Barbara Ehrenreich,  
Edward Abbey, Karsten Heur and Susan Orlean. Students  
will read as writers, scour the texts for craft and style tactics  
and critique class members’ essays. 4 credits.

342  Modern British and American Drama  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Study of some of the powerful and varied work of recent  
dramatists, with attention to the conditions of the theatre of  
their time. Dramatists studied might include Shaw, Eliot,  
O’Neill, Miller, Wilde, Osborne, Arden, Pinter, Shaffer,  
Bolt, Orton, and Shepard. 4 credits.

343  Drama at Stratford  
GER: VP (Visual and Performing Arts)  
Prerequisite: any first year writing seminar  
Offered only as part of the Fall Term in England program.  
Study of the drama being performed in London and  
Stratford by the Royal Shakespeare Company, the National  
Theatre and others. 4 credits.

345  Travel Study in the British Isles  
Texts and culture in the United Kingdom and Ireland.  
Specific topics will change from year to year. 4 credits.

351  Modern Poetry  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Works by at least a half-dozen prominent poets will be read,  
analyzed, and evaluated. Although prosody, poetic theory,  
and the development of modernism will be covered, major  
emphasis will be on the aesthetic qualities of individual  
poems and the distinctive sensibilities of individual poets. 4 credits.

352  Experimental Poetries  
Prerequisite: any first year writing seminar  
Introduction to different kinds of British and American  
poetic forms and poetic expression of the twentieth century: some that  
reaffirm the well-known person-centered lyric in various  
 guises, and others that question the notions of expressivity  
and authenticity to redefine the lyric through a relatively  
more pronounced linguistic experimentation. 4 credits.

355  Religious Poetry in English  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Selected religious poets writing in English in the Christian  
tradition, from the seventeenth century to the present.  
Special attention to the function of metaphor in rendering  
religious experience. 4 credits.

361  History of the English Language  
GER: HB (Empirical Study of Human Behavior)  
Prerequisite: any first year writing seminar  
Survey of the internal history of English, reviewing Indo-  
European and Germanic background and studying the  
development of phonology, morphology, and syntax from  
Old English to Modern English. 4 credits.

362  English Language: How it Works  
GER: HB (Empirical Study of Human Behavior)  
Prerequisite: any first year writing seminar  
Introduction to basic English linguistics. The difference  
between prescriptive grammar (the rules we learn in school)  
and descriptive grammar (the linguistic rules that native
speakers of a language have learned). Discussion of the main divisions of linguistics, focusing on the phonology, morphology, and syntax of Edited American English. Study of the ways other dialects, in particular, Southern American English and African American Vernacular English, differ from the standard and exploration of the implications of linguistics on social and educational policy. 4 credits.

369  Gender in South Asian Literature and Film  
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)  
Prerequisite: any first year writing seminar  
Introduction to the various debates over the representations of masculinity and femininity as these categories intersect with other forms of identity and belonging, such as caste/class, nation, race, and sexuality through the reading of literary and filmic texts. 4 credits.

371  Mystery and Detective Fiction  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Study of mystery fiction and its offshoots (detective, suspense, spy) in English and translation. Possible writers: Shakespeare, Walpole, Poe, Hammett, Mankell. Critical perspectives may include narrative studies, gender criticism, Marxist criticism. 4 credits.

372  Studies in Short Fiction  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
This course considers the short story as a genre, beginning with its roots in fables, parables and fairy tales and tracing its development to the dynamic form we see in contemporary work. Students will read both American and international authors and discuss works on the basis of both thematic and formal qualities. 4 credits.

373  Fantasy and Science Fiction  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Exploration of how race, colonialism, gender, science, the sacred, and the human inform our fantasies about other worlds and times. May trace dialogue between contemporary fantasy/science fiction and literature of other periods. 4 credits.

374  Stardom and Identity  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Exploration of the historical development of the Hollywood star system and the complex role stars play in American film and culture, focusing on representative classic and contemporary film “stars,” and analyzing how stars are produced by the studio system and its remnants in the contemporary Hollywood dream factory and remade in the cultural imaginary. 4 credits.

375  Screening Film Noir  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Examination of distinctive stylistic and thematic features of film noir as it emerged in its classic period and as it returns in contemporary American cinema. The course will also consider the “noir anxiety” that emerges around identity as it relates to historical trauma, sexual roles, race and ethnicity and do so with an eye toward assessing the critical social commentary offered by both classic and contemporary noir cinema. 4 credits.

376  Shakespeare on Film and in Production  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Study of Shakespeare’s plays on film or in production if live performances occur during semester the course is taught. Shakespeare’s written texts may be studied, but focus will be on the artistry of the cinema or theater in revealing Shakespeare for modern audiences. 4 credits.

377  Studies in the Essay  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The essay as a genre, beginning with work from early practitioners such as Montaigne, Hazlitt, Lamb, and Shonagon, and tracing its development to the dynamic form we see in contemporary work. Students will read both American and international writers and discuss works on the basis of both thematic and formal qualities.

401  Studies in Chaucer  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The poetry of Chaucer, in Middle English, including some early poems, Troilus and Criseyde, and substantial selections from The Canterbury Tales. Special attention to the development of Chaucer’s narrative art, his invention of the Chaucerian persona, and his relevance to postmodern thought, conceived as his self-consciousness about the use of language and his ambivalence about the value of literary art. 4 credits.

403  Faulkner  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Chronological study of the development of Faulkner’s art from Flags in the Dust to Go Down, Moses. Attention paid to the concept of Yoknapatawpha County and to the various innovative narrative techniques Faulkner employed. 4 credits.

404  Major Figures in Early Modern British Literature  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Study of works written by major authors in the reigns of the Tudors and the Stuarts. Authors include Sidney, Spenser,
Wroth, Marlowe, Jonson, Milton, or the major lyric poets. Focus on major works in their entirety written by single authors except in the case of the lyric poets. 4 credits.

405 Studies in Gothic Literature  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The course examines literature that evokes terror and horror, explores the possibility of supernatural forces, portrays mental disintegration, transgresses social, political, and moral norms, and exposes cultural anxieties and oppression. Topics and texts may vary. 4 credits.

408 Renaissance Epic  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The nature and purpose of the epic in the European Renaissance through a close study of Dante’s Divine Comedy, Ariosto’s Orlando Furioso, Spenser’s Faerie Queene, and Milton’s Paradise Lost. Renaissance theories of allegory and genre and the cultural work of these epics are explored. 4 credits.

411 Satire  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Readings in satirical literature of all genres and many periods, with an emphasis on satire of the early eighteenth and the late twentieth centuries. Some attention to satire in forms other than literature. Focus on function, method, characteristics, and problems of the satirical mode. 4 credits.

412 Autobiographical Lives and Life  
GER: UQ (Ultimate Questions)  
Prerequisite: any first year writing seminar  
Topics include spiritual and moral concerns contrast with other forms, such as biography and memoir, and specific sub-genres. Film adaptation or autobiographical film may also be considered. Alternating versions will include either an American emphasis or a global emphasis. 4 credits.

415 Studies in Contemporary American Literature  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Readings in American literature from 1950 to the present, with emphasis on what might make this recent writing different from what came before, or “postmodern” in terms of aesthetics and cultural context. May address fiction, drama and poetry or concentrate on a single genre. 4 credits.

416 Environmental Writing  
GER: NE (Humans and the Natural Environment) and TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Focus on works commonly considered major examples of environmental writing and an examination of the theoretical/critical considerations involved in reading these works. Writers to be discussed include James Fenimore Cooper, Henry David Thoreau, John Muir, Mary Austin, Aldo Leopold, Rachel Carson, and Barry Lopez. Theoretical problems such as the relation of writing to lived experience and the justice of emphasizing all life over human life will help focus discussions. 4 credits.

418 Shakespeare’s Europe/England’s Renaissance  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The influence of important classical and Renaissance European writers on the literature and drama of Shakespeare’s England. Topics vary, but may include the impact of authors such as Dante, Ovid, Montaigne, Petrarch, and others on Donne, Herbert, Marlowe, Milton, Shakespeare, Spenser, and their peers. 4 credits.

420 Animals in Medieval Literature and Culture  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Explores medieval literature about animals, humans’ historical relationships with other animals, philosophical discussions of the idea of “the animal,” and connections between medieval views of animals and modern ecological issues. 4 credits.

421 Medieval Arthurian Literature  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Study of the earliest tales of King Arthur and his knights. Course focuses on medieval European literature but may include one contemporary version. Authors include Chrétien de Troyes, the Gawain poet, Malory, and others. 4 credits.

422 Literature of the South  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The dialogue about race, class, and gender that takes place between writers such as Faulkner, Warren, Gaines, Welty, O’Connor, Walker, and Alison. 4 credits.

423 Literature of the Irish Renaissance  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
The remarkable literary flowering contemporary with the late nineteenth-century movements in Ireland that led to the creation of the Irish Free State in 1921, and with the difficult historical circumstances faced by the new nation in the first years of its existence. The major figures studied include Yeats, Joyce, Synge, and O’Casey. 4 credits.

434 What is Postcolonialism?  
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)  
Prerequisite: any first year writing seminar  
Introduction to the field of Postcolonial Studies through
the study of literary, filmic, and theoretical texts focusing on the historical and ongoing interactions of European and non-European cultures from the perspective of domination, resistance, and the search for alternatives. 4 credits.

454 Caribbean Cosmopolitanisms
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
Reading across Caribbean literatures, cultures, languages, and theories which organize the region, exploring the ways in which cosmopolitanisms shape the literary and cultural productions of the Caribbean. Attention paid to the ways cultural hybridity emerges against the persistence of a mythological, cultural, and national homogeneity. Authors might include William Shakespeare, Charlotte Bronte, Michelle Cliff, Junot Diaz, Christina Diaz, Jamaica Kincaid, Earl Lovelace, and Jean Rhys. 4 credits.

455 Interpretive Issues in Early Modern Literature
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
Study of key issues for understanding early modern British literature and its place in a history of ideas in the West. Topics include early modern literature in relation to the histories of science, individualism, gender and sexuality, privacy, literary criticism, authorship and/or the place of period texts in emerging theories of literature and history. 4 credits.

456 Comparative Ethnicities
GER: WC (World Cultures)
Prerequisite: any first year writing seminar
Emphasis on a comparative approach to Asian American, Jewish American, Native American, African American, Caribbean, US-Latino, and Chicano literatures. Focus will be on how writers of color address histories of ambivalent citizenship; how the immigrant experience and the return home changes both America and the world; the problematic concept of America itself, always seemingly at battle with itself. Some of the rhetorical battles waged over the meaning of an American national and hemispheric identity in the works of Gish Jen, Leslie Marmon Silko, Ralph Ellison, Maxine Hong Kingston, Sherman Alexie, Cristina Garcia, Junot Diaz, Philip Roth, and Edwidge Danticat, among others. 4 credits.

457 African American Drama
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
The history and development of African American drama in the United States from its origins to the present moment. Exploration of the roots of African American drama, the black theater of the Harlem Renaissance, the Little Theater Movement, and the Harlem Unit of the Federal Theater Project. A study of recent major plays from Lorraine Hansberry’s A Raisin in the Sun to Suzan Lori-Park’s Topdog-Underdog. 4 credits.

461 Critical and Cultural Theory
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: any first year writing seminar
Introduction to theoretical approaches to literature, such as psychoanalysis, deconstruction, feminism, and postcolonial studies. Consideration of the ethics and politics
of interpretation, the assumptions and practices informing theoretical work, and the relation between literature and theory. Readings include works of fiction, film, and texts by theorists such as Freud, Lacan, Kristeva, Zizek, Derrida, de Man, Butler, Cixous, Spivak, Bhabha. 4 credits.

462 The Stage, Social Struggle, and Theory  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: any first year writing seminar  
Exploration of the way the theatre and drama become sites for producing social discourses and institutions. Focusing on one or more key periods in world drama, students will study the interrelations of plays, theoretical formulations, and specific material conditions of performance. 4 credits.

471 South Asian Cultural Studies: Literature and Film  
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)  
Prerequisite: any first year writing seminar  
Introduction to the complex array of issues essential to understanding South Asian cultures in the contemporary context. Examining literary texts and films through interpretive approaches appropriate to the pluralistic cultural traditions of the region and informed by current debates in the humanities. 4 credits.

475 Senior Seminar in English  
Prerequisite: any first year writing seminar  
A seminar exploring a specific topic in literature, language, theory, and/or film. Students engage scholarship and research methodologies appropriate to the topic to produce an extensive and significant critical study. Designed for senior English majors. 4 credits.

501 Independent Study  
Variable credit.

503 Individualized Internship  
Prerequisite: instructor permission  
Student will develop an internship to work at a business, agency or media site for approximately 210 hours over the term and will meet the objectives of a learning agreement completed with the employer and approved by a faculty sponsor. Requirements include a work journal, portfolios, and assigned academic papers relating to their internship. Open primarily to seniors and juniors. May not contribute to the major. Cannot be completed through the pass-no pass grading option. Not repeatable. Variable credit.

505 Structured Internship  
Prerequisite: instructor permission  
Students will develop internships at businesses, agencies, or media sites for approximately 210 hours over the term and will meet the objectives of a learning agreement completed with the employer and approved by a faculty sponsor. The internship site must permit the student a significant degree of professional writing. A weekly seminar class focuses on the objectives and issues of students’ experiences as they develop their verbal and written communication skills. Course requirements include a work journal, portfolios, and academic papers relating to their internship. The course is open primarily to seniors and juniors. The course may contribute to the major. Cannot be completed through the pass-no pass grading option. Not repeatable. Variable credit.
Health Sciences

Professors: Caterisano, Feigenbaum, Moss, Patrick, Pearman, W. Pierce (Chair)
Associate Professors: Powers, Reed
Assistant Professors: Hutchison, Murr, Slining, The
Lecturers: Frazier

Students interested in majoring in Health Sciences must seek early advice from a member of the faculty and declare the major with the department chair. Majors may pursue either a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree.

A major must include:
- HSC-101, 201 and 210
- Two of the following courses: HSC-211, 221, 311, or 323
- Two more courses from the following: HSC-301, 302, 303, or 304
- at least four additional HSC courses numbered 211 or greater

Students seeking the B.S. degree must also complete:
- MTH-141 or 150, and
- at least two more courses from the following: BIO 111, 221, 322, CHM 110, 115, 120, EES 110, 112, 113, PHY 111, 112, PSY-320 or SUS-120.

Health Sciences (HSC) Courses

101 Wellness Concepts
*GER: MB (Mind & Body)*
Wellness concepts which promote lifetime fitness and healthy lifestyle habits. Topics include: aerobic and muscular conditioning, nutrition, and medical aspects of fitness. Participation in activities to develop cardiorespiratory endurance, muscular strength and endurance, and flexibility. 4 credits.

151 Current Issues in Public Health
Prerequisite: HSC-101
An examination of major public health issues of regional, national and international concern at the time of the course offering. Topics may vary from year to year. Emphasis will be given to behavioral and policy interventions. May Experience ONLY. 2 credits.

152 Three Great Public Health Pandemics
The historical epidemiology, physiology and public health impact of three of the largest pandemics in human history: the Bubonic Plague of the 14th Century, the Cholera Pandemic of the 19th Century, and the HIV/AIDS Pandemic of the 20th Century. May Experience ONLY. 2 credits.

200 Health Education and Physical Activity
Prerequisite: HSC-101
Provides elementary teacher candidates with a variety of integrative teaching experiences that incorporate movement concepts into health education. Each candidate will understand the importance of physical activity and lifelong movement to enhance the quality of life for elementary students. 4 credits.

201 Research & Evaluation in Health Sciences
*GER: HB (Empirical Study of Human Behavior)*
Prerequisite: HSC-101
Principles of research relevant to Health Sciences focusing on methodology, measurement, and statistical techniques used in the analysis and interpretation of human performance data. Integration of statistical software functions and communication technology used for problem solving. It is recommended that this course be enrolled early in the major. 4 credits.

210 Anatomy and Physiology
Prerequisite: HSC-101
An integrative study of the structure and function of the following body systems: skeletal, muscular, nervous, cardiovascular, and respiratory. The integration of structural and functional aspects of the human body will be facilitated by the use of anatomical models, interactive computer software, and data collection and analysis. It is recommended that this course be enrolled early in the major. 4 credits.

211 Anatomy and Physiology II
Prerequisite: HSC-210
Continuation of HSC-210. An integrative study of the structure and function of the following body systems: endocrine, lymphatic, digestive, urinary, reproductive, integumentary. The integration of structural and functional aspects of the human body will be facilitated by the use of anatomical models, interactive computer software, and data collection and analysis. Students may not receive credit for either BIO-118 or BIO-322 after successful completion. 4 credits.

221 Motor Development
*GER: HB (Empirical Study of Human Behavior)*
Prerequisite: HSC-101
Principles of growth and development as related to neuromuscular integration and motor learning. Topics include: skill acquisition, skill refinement and adaptation of
techniques for special populations. Laboratory experience in motor development included as well as work with atypical clients in the exercise science setting. 4 credits.

230  Analysis of Human Performance
Prerequisite: HSC-201
Laboratory techniques for the assessment of the anatomical, cardiorespiratory, neuromuscular and anthropometric components of human movement with an emphasis on the underlying physics and physiology of human motion. Separate laboratory component required. 4 credits.

242  Scientific Principles of Coaching
Prerequisite: HSC-101
Concepts of physical conditioning from the theoretical to practical application of program design. Lectures cover current theories on training; discussions engage students in case studies. Labs provide opportunities for testing and preparing athletes. Separate laboratory component required. 4 credits.

244  Scientific Principles of Training
Prerequisite: HSC-101
The science of designing effective exercise programs for different populations and sport performances. How to design physical assessment tests and teach proper exercise techniques. 4 credits.

301  Fundamentals of Public Health
Prerequisite: HSC-101
An introduction to the academic discipline of public health, including the sub-disciplines of health care systems and disease epidemiology. Emphasis on the theory, planning, implementation and evaluation process for public health interventions. 4 credits.

302  Physical Activity and Public Health
Prerequisite: HSC-101
Regular physical activity has long been regarded as an important component of a healthy lifestyle. Scientific evidence links regular activity to a wide array of physical and mental benefits. Examination of the well-documented public health implications associated with leading an active lifestyle. 4 credits.

303  Epidemiology
Prerequisite: HSC-201 and 301
An introduction to epidemiologic concepts and methods used to evaluate the distribution and determinants of health and disease in populations. Emphasis on basic principles of epidemiology, measures in epidemiology, and epidemiologic study designs and analysis. Other topics that are important to an introductory understanding of epidemiology including outbreak investigations, screening, and the role of epidemiology in public health will also be included. 4 credits.

304  Community and Environmental Health
GER: NE (Humans and the Natural Environment)
Prerequisite: HSC-101
A study of community and environmental health concepts in the US and in developing countries. Exploration of supportive and non-supportive cultural practices that affect community and environmental health. Research opportunities, engaged and service learning experiences will be included. 4 credits.

305  Global Public Health
GER: WC (World Cultures)
Prerequisite: HSC-301
An introduction to the basic principles of public health as they apply to populations across the world including key concepts for global health issues at a population level as well as exploring the progress that has been made over the last 50 years in improving health status in many countries. 4 credits.

311  Physiology of Exercise
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: HSC-201
Concepts and laboratory experiments concerning the mechanisms by which the human body functions, with special reference to the effects of acute and chronic exercise. Not open to first year students. 4 credits.

313  Medical Aspects of Athletics
Prerequisite: HSC-210
Prevention and management of athletic injuries. 4 credits.

315  Fundamentals of Nutrition
Prerequisite: HSC-101
In-depth continuation of the study of nutrition as presented in Wellness Concepts. Study of the structure, function and selection of food to resist disease, improve health and support maximum human performance. 4 credits.

323  Kinesiology
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: HSC-210 and MTH-110, 141 or 150
Study of living systems in motion. Structured around classic mechanics. Evaluating human motion by the methods of kinematics and kinetics. Topics include: the work-energy theorem, Archimedes' principle, Bernoulli's law and others that govern human motion. Laboratory exercises developed to bridge the gap between lecture materials and real world applications. 4 credits.

331  Analysis of Cardiovascular Function
Prerequisite: HSC-101
Concepts and laboratory experiments concerning the mechanisms by which the human body functions. Special reference to the effects of acute and chronic exercise. Not open to first year students. 4 credits.
**332 Practicum in Graded Exercise Testing**  
Prerequisite: HSC-331  
Practicum experience in laboratory for assessing cardiac and respiratory function, exercise capacity, body structure and composition via techniques of electrocardiography, impedance cardiography, spirometry, graded exercise testing, anthropometry, densitometry, etc. 4 credits.

**341 Physiology of Aging**  
Prerequisite: HSC-101  
Physiological basis of changes that occur during the aging process from the cellular to the whole animal level. Demography, evolutionary and mechanistic theories of aging, physiological changes, and the role of physical activity, nutrition, and disease during the aging process. 4 credits.

**342 Clinical Physiology and Rehabilitation**  
Prerequisite: HSC-101  
Pathophysiology, interventions, and comprehensive rehabilitation program design for chronic disease patient populations. 4 credits.

**411 Advanced Principles of Public Health**  
Prerequisite: HSC-301  
Advanced study of public health theory, planning, implementation and evaluation models for individual and community behavior change. 4 credits.

**415 Advanced Nutrition Principles**  
Prerequisite: HSC-315  
Integration of principles of nutrition, etiology of prevalent chronic diseases, exercise physiology and physiology of aging with the purpose of preventing and managing prevalent chronic diseases, optimizing human performance and maximizing quality of life throughout the life cycle. 4 credits.

**441 Sport in Modern Society**  
Prerequisite: HSC-101  
Study of sport as one of the most pervasive social institutions in our society. An investigation of the social aspects of sport and the relationship between sport activities and the social system in which they are embedded. 4 credits.

**451 Biomechanics**  
Prerequisite: HSC-210, HSC-311, PHY-111 and MTH-110, 141 or 150  
Integrates the principles of biology and mechanics as they relate to human motion and includes analysis of energy transduction in human motion as it relates to posture, mechanical work and gravity. Course is split equally between lecture and laboratory applications. Students complete and present a motion analysis study related to human performance, energy transduction and their interdependence. 4 credits.

**452 Principles of Administration**  
Prerequisite: HSC-101  
Conventional management practices and operational guidelines for fitness and sport industries. Topics include organizational leadership, planning, human resources, facilities, marketing and public relations, risk management and legal issues, and program evaluation. 4 credits.

**470 Senior Seminar in Health Sciences**  
Prerequisite: declared major in Health Sciences  
Discussion based meetings will explore significant issues and trends in the fields of public health sciences. Students will conduct a current literature research study in conjunction with the topics covered in the seminar and make a presentation which encourages students to integrate and to reflect upon their core curriculum and applications to the profession. 4 credits.

**475 Research Seminar in Health Sciences**  
Prerequisite: declared major in Health Sciences  
Students will conceive, design and execute an original research project and make a presentation which encourages them to integrate knowledge from the HSC core curriculum. The seminar will be accompanied by discussions concerning the research process and data analysis. 4 credits.

**501 Independent Study**  
Prerequisite: HSC-101 and a written outline of proposed study for staff approval in the prior term. Format for the outline should be obtained from the advisor. Provision for non-experimental investigations. Variable credit.

**502 Research**  
Prerequisite: HSC-101 and a written outline of proposed study for staff approval in the prior term. Format for the outline should be obtained from the advisor. Provision for experimental research. Variable credit.

**503 Individualized Internship**  
Prerequisite: declared major in Health Sciences  
Individualized internships are typically developed by students and approved by a faculty sponsor. Working with an on-site supervisor, students develop objectives for the internship experience, write a report of their activities, read professional literature related to their internship experiences, and offer a written and oral summary of their activities at the conclusion of the internship. Course MUST be enrolled on a pass-no pass basis and will not count toward the Health Sciences major requirements. Variable credit.
505 Structured Internship
Prerequisite: declared major in Health Sciences
Internships typically developed by faculty members at
approved sites. Students develop objectives with faculty
and the on-site supervisor, write a report of their activities,
read professional literature related to their internship
experiences, attend a weekly seminar to discuss their
activities and offer a written and oral summary of their
activities at the conclusion of the internship. This class may
be enrolled only once and may NOT be enrolled through the
pass-no pass grading option. Variable credit.

History

Professors: Barrington (Chair), Benson, Ching,
Fehler, O’Neill, Shi, Spear, Strobel, Vecchio
Associate Professor: Nair
Assistant Professors: Day, Hansen, L. Harris,
Matsumura, C. Sisman, Tollison

A major in history consists of at least nine courses
and must include:

- one foundation course focused on
  European history: HST-100, 101, 102, 103
  or 104,
- one foundation course in North American
  history: HST-120, 121 or 122,
- one foundation course considering the
  history of Africa, Asia, or Latin America:
  HST-141, 142, 145, 151, 152, 153, 155,
  156, 161, 162, 165, or 166,
- at least four advanced history courses
  (courses numbered 200 or greater),
- HST-475, and
- at least one additional history course.

At least one of the nine courses required for the
history major most focus on the “pre-modern era”.
Currently, HST-101, 102, 103, 141, 151, 152,
155, 161, 165, 201, 203, 206, 207, 208 or 251 can
serve in this role. Two different versions of HST-
209 can also meet this requirement dependent on
the topics considered.

One first year seminar taught by a member of
the history department may also contribute to
the major, but will not be considered one of the
three required foundation courses. Further, no
more than two exam equivalency courses (HST-
100, 120, or 130) and/or first year seminars may
contribute to major requirements.

All exceptions to major requirements must be
approved by the department chair.

Majors wishing to pursue a career in teaching
social studies must complete EDU-111, 120, 221,
350, 453, 460, 472, and EDEP-670 in addition
to prescribed courses in the major which must
include HST-237, at least two other courses focused on the history of the United States, and at least three European history courses with one or more numbered between 200 and 399. Further requirements for certification in social studies include ECN-111, GGY-230, PSC-101 and 102, PSY-111, and SOC-101 or 201. The teaching internship must be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

History (HST) Courses

100 European History Exam Equivalency
4 credits.

101 Ancient Europe and the Mediterranean
GER: HA (Historical Analysis of Human Interactions)
The Ancient Near East, Greece, and Rome to c. 500 C.E. Coverage of social, intellectual, political, cultural, and religious developments. 4 credits.

102 Medieval Europe, c. 500 – c. 1450
GER: HA (Historical Analysis of Human Interactions)
European social, intellectual, political, cultural, and religious developments from the break up of the Roman Empire (c.500) to the Renaissance (c.1450). 4 credits.

103 Early Modern Europe
GER: HA (Historical Analysis of Human Interactions)
The European social, intellectual, political, cultural, and religious developments from the era of Renaissance and Reformation through the Age of Absolutism. Key themes include: the Italian Renaissance, voyages of exploration, colonialism, printing press, Protestant and Catholic reformation, Scientific Revolution, religious wars, absolutism and constitutionalism, and the witch craze. 4 credits.

104 Modern Europe, c. 1715 - Present
GER: HA (Historical Analysis of Human Interactions)
The history of Europe from the time of the Enlightenment to the present. Major themes include: the Enlightenment, the French Revolution, nationalism, socialism, liberalism, imperialism, the World Wars, fascism and communism, the Holocaust, post-WWII reconstruction and the Cold War, decolonization, citizenship, immigration, the end of communism, market integration, a common currency, and the evolution of the European Union, and globalization. 4 credits.

120 American History Exam Equivalency
4 credits.

121 North America and the United States to 1877
GER: HA (Historical Analysis of Human Interactions)
North American history to 1877 in the context of western traditions and global interactions. 4 credits.

122 United States since 1877
GER: HA (Historical Analysis of Human Interactions)
North American history from 1877 to the present in the context of western traditions and global interactions. 4 credits.

130 World History Exam Equivalency
4 credits.

141 Colonial Latin America
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
The Spanish and Portuguese Empires in the western hemisphere, from the first explorations and settlements until the achievement of independence in the 1820s. Includes coverage of political and religious institutions and social issues such as race relations and piracy. 4 credits.

142 Modern Latin America
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Latin America since the nineteenth century. Topics include: nationalism, military authoritarianism, social revolution and the wealth inequities that have defined the region as part of the developing world. Case studies will often be used to highlight continental trends. 4 credits.

145 History of Africa
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Survey of Africa from earliest times to the present. Topics include: the peopling of the continent, the development of precolonial politics, cultures and economic systems; the African diaspora; European colonialism; and post-colonialism. 4 credits.

151 Early Middle East
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
A history of the Middle East from the rise of Islam (600s C.E.) to the emergence and growth of the Ottoman Empire (1400s). Topics of consideration are the life and contributions of Prophet Muhammad, the rise and rapid spread of Islam, the exploits and achievements of the Arab caliphates based in Damascus and Baghdad, the rise of the Turks, the age of the Crusades, and the coming of the Ottomans. 4 credits.
152 Islamic Empires: Ottomans, Safavids, Mughals
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
A comparative examination of the rise and “decline” of the three great Muslim empires of the Early Modern period (1400-1800s). Considers the problem of political legitimacy; transformations in religious practices; the relationship among these empires and the West; and lastly their legacies in the modern world. 4 credits.

153 Modern Middle East
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Examination of the major political and social developments in the Middle East in the nineteenth and twentieth centuries. Attention divided among the Arab, Persian and Turkish peoples and states. 4 credits.

155 Ancient and Early South Asia
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Introduction to South Asia from prehistory to the early 16th century. Focus on the transformations of human environments in the Indian subcontinent, such as river-valley settlements, urban development, early state formation, long-distance trade, and mobility. Major themes include: interaction and integration, and diversity of ritual and cultural practices. 4 credits.

156 Modern South Asia
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
The history of South Asia from the 16th century to present. Focus on Mughal dynasties and Indo-Islamic cultures, European traders and the British imperial projects, multiple resisters to imperial rule, and the creation of and challenges facing postcolonial South Asia. 4 credits.

161 Ancient and Early Japan
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Survey of Japan from its prehistoric origins to the early 17th century. Topics include: archaeology and history, origins of “Japan,” the emergence of the imperial state, court rulership, and the rise of the samurai. 4 credits.

162 Modern Japan
GER: GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Survey of Japan from the 16th century to the present. Topics include: Tokugawa societies and cultures, economic systems, Imperial Japan and world wars, global interactions, modernity and modernization, and contemporary Japanese issue. 4 credits.

165 Ancient and Imperial China
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
The history of Chinese civilization from its origins to 1600. Topics include: ideals of cultural unity and division, classical philosophy, religious beliefs and practices, formation of imperial institutions, economic and intellectual revolutions, conflict and accommodation with neighboring peoples, and epic transformations of state and society. 4 credits.

166 Modern China
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
China in the modern world. Examining major political, social and cultural transformations of the period from the late Qing dynasty to recent dramatic reforms in mainland China and on Taiwan. 4 credits.

201 “Fall” of Rome
Prerequisite: one history course numbered between 100 and 166
Examination of the events and interpretations of the Late Roman Empire, including the rise of successor kingdoms in the West and the survival of the Eastern (Byzantine) Empire. 4 credits.

203 Crusades
Prerequisite: one history course numbered between 100 and 166
The Crusading movement from 1095 to 1291, including its origins, decline, relations with both Byzantium and Islam, and its impact. 4 credits.

206 European Reformations
Prerequisite: one history course numbered between 100 and 166
European history in an age of evolving religious ideologies and increased interaction with the non-European world. Major themes include: matters of religious content, political, cultural, intellectual, and social history. 4 credits.

207 Germany and the Thirty Years’ War: War and Peace in Europe
Prerequisite: one history course numbered between 100 and 166
A study of the Thirty Years’ War, which devastated early modern Germany, emerged out of particular religious/political constellations of the Holy Roman Empire but was shaped by complex European foreign policy and had long-term impact on European diplomacy. 4 credits.
208 **Tudor and Stuart England**  
Prerequisite: one history course numbered between 100 and 166  
Analysis of the period that witnessed England's emergence as a major European power. Emphasis on political, religious, constitutional, foreign policy, and socio-economic transformations of this transitional period. 4 credits.

209 **Episodes in British History**  
Sustained historical analysis of a particular event or theme relating to the British Isles. Possible topics include Anglo-Saxon Riddles, Trial of Charles I, Scottish wars, Elizabeth I vs. Philip II, Irish conquests, Bridewell and Bedlam - Prisons and the Mad, Whigs & Tories, Habeas Corpus, London’s Apocalypticism, Cornwallis in India and America, the Street and the Sewer in Victorian England, Cultural History of Jack the Ripper, Oswald Mosley and the British Union of Fascists, the Blitz, Brit Rock and Postwar Social Rebellion, Thatcher’s Multicultural Britain. May Experience ONLY. 2 credits.

210 **Modern France**  
Prerequisite: one history course numbered between 100 and 166  
French history since 1715. Investigates political, ideological, cultural, and social developments in France from the accession of Louis XV to the present day. Topics include: the French Revolution, Napoleon, French imperialism, French involvement in the two World Wars, and France’s role in the European Union. 4 credits.

211 **Twentieth Century Germany**  
Prerequisite: one history course numbered between 100 and 166  
German history from the catastrophic violence of two world wars and the Holocaust, through the process of postwar rebuilding in East and West, to the peaceful revolution that ended the Cold War in 1989 and helped to initiate reunification in 1990. 4 credits.

213 **Nation and Race in Modern Europe**  
Prerequisite: one history course numbered between 100 and 166  
Development of concepts of race and nation in Europe since early nineteenth century. Topics include: scientific racism and eugenics; the origins of modern nationalism; contemporary theories of nationalism; the roots of modern anti-Semitism; ethnic cleansing and genocide. 4 credits.

214 **Modern Russia and Eastern Europe**  
Prerequisite: one history course numbered between 100 and 166  
Russian and Eastern European history since 1683. Investigates the political, social, and intellectual history of Russia and Eastern Europe since the battle of Vienna. Topics include: formation of empire, the rise of nationalism, the two World Wars, Communism, genocide and the post-Cold War era. 4 credits.

215 **Women and Gender in European History**  
Prerequisite: one history course numbered between 100 and 166  
The political, economic and social forces affecting womens’ lives in European society. Beginning with theories of patriarchy, the status of women during the Greco-Roman period, Medieval Europe, the Early Modern Period, the first Industrial Revolution and post-industrial society. 4 credits.

216 **Modern Britain**  
Prerequisite: one history course numbered between 100 and 166  
British history since 1714. Investigates political, ideological, cultural, and social developments in Britain from the beginning of the Hanoverian dynasty. Includes the Industrial Revolution, British imperialism, the two World Wars, and multicultural Britain today. 4 credits.

221 **American (U.S.) Revolution**  
Prerequisite: one history course numbered between 100 and 166  
The ideas, the violence, and the accidents that gave rise to an independent United States of America. The relationship between the Revolution and broader movements such as nationalism and anti-slavery. Stresses the Revolution’s European and global contexts. 4 credits.

223 **The United States in the Nineteenth Century**  
Prerequisite: one history course numbered between 100 and 166  
Survey of major events and trends in America from 1820-1890, along with focus on selected events and episodes and work with primary materials from the period. Major political, social, economic and cultural transformations, including conflicts over territorial expansion; sectionalism and nationalism; urban and industrial growth; changes in family, community, ethnicity, and spirituality. May include digital or archival components. 4 credits.

224 **American (U.S.) Civil War**  
Prerequisite: one history course numbered between 100 and 166  
Examination of the Civil War as a political, cultural, economic and military phenomenon, with focus on the 1861-1865 period. Topics include: causation historiography, major battles and their political context, the role of ordinary Americans in the conflict, slavery and emancipation, economic effects, Reconstruction, and the war’s enduring place in national memory. 4 credits.

225 **United States Age of Reform**  
Prerequisite: one history course numbered between 100 and 166  
Examination of basic domestic problems and foreign policy in United States history of the period. Includes modernization, imperialism, entry and objectives in the World Wars, the complexities of the 1920s, the Great Depression and the New Deal. 4 credits.
227 United States since 1941
Prerequisite: one history course numbered between 100 and 166
The evolving experience of the American people from 1941 to the present, and the conflicting social, racial, political, economic, and international forces which have shaped that experience. 4 credits.

228 United States Social and Intellectual History
Prerequisite: one history course numbered between 100 and 166
Social reform movements and related ideologies from the American Revolutionary era to the late twentieth century. The evolving role of women and minorities in American society and their changing relationship to power is examined through a focus on gender, race, class, region, and ethnicity in the American Revolution, the antebellum reform era, WWII, the social movements of the 1960s and 1970s and the Cold War. 4 credits.

229 African American Experience
Prerequisite: one history course numbered between 100 and 166
Emphasis on the African origins of black Americans, the slave experience, the impact of the Civil War and Reconstruction, and the civil rights movement. 4 credits.

231 History of Women in America
Prerequisite: one history course numbered between 100 and 166
The history of women in America from the colonial period to the present. The focus in not on chronology, but on acquainting students with topics which disclose significant events, issues and problems in the changing experience of American women. 4 credits.

233 American Immigration History
Prerequisite: one history course numbered between 100 and 166
History of immigration to the United States with particular attention to issues of race, ethnicity, and citizenship. Gender and migration, incorporation into American society, the politics of nativism, and exclusion and immigration laws. 4 credits.

234 United States Foreign Policy since 1898
Prerequisite: one history course numbered between 100 and 166
Treatment of the diplomatic history of the United States from 1898 to the present. Emphasis on the rise of the United States as a global superpower. 4 credits.

236 United States South
Prerequisite: one history course numbered between 100 and 166
Investigation of the development of the South as a region and section, with particular emphasis on economic and social history and the question of the uniqueness of the South. Special study devoted to race relations. 4 credits.

237 South Carolina
Prerequisite: one history course numbered between 100 and 166
Study of the development of South Carolina as an American state and its unique contribution to the United States as well as the way in which it reflects development in the South and the nation as a whole. 4 credits.

244 Revolution in Modern Latin America
Prerequisite: one history course numbered between 100 and 166
Revolutionary movements in modern Latin America, considering their origins, evolution and outcomes. Case studies and a comparative methodology are likely. Possible cases are Mexico, Cuba and Nicaragua. The role of the United States will be considered. 4 credits.

251 Jews and Christians of the Islamic Lands
Prerequisite: one history course numbered between 100 and 166
Historical analysis of social, economic and religious status of Jews and Christians under Islamic polities since the time of Muhammad to the present day, with particular emphasis on polemic, conflict and cooperation between Jews, Christians and Muslims. 4 credits.

253 Christian Missionaries in the Middle East
Prerequisite: one history course numbered between 100 and 166
Historical analysis of american missionary activities among the Jews, Muslims and “nominal” Christians in the Middle East. More particularly, it will examine the activities of American Board of Committee for Foreign Mission (ABCFM), which was the largest missionary organization in the States, founded in Boston after the Second Great Awakening. Includes a trip to Harvard University, where all of the archives of the ABCFM are currently housed, aiming to construct biographies of important missionaries. May Experience ONLY. 2 credits.

256 Gender History of South Asia
Prerequisite: one history course numbered between 100 and 166
Questions of gender in colonial and postcolonial South Asia, and its diaspora. Topics include “tradition” and “modernity,” patriarchy, power and agency, sexuality, and nationalism. Thematically organized to present and critique gender, history, and South Asia, and to introduce global feminisms. 4 credits.

262 Japanese Social Movements During the Cold War
Prerequisite: one history course numbered between 100 and 166
This course examines the development of Japanese social movements from the 1950s through the late 1980s, focusing on anti-American and anti-ruling party movements that prioritized local autonomy, social justice and environmental sustainability over the mobilization of people and resources.
to aid the Cold War in Asia. Focus is also placed on the ways in which the history of these turbulent times have been told, and the political consequences of competing narratives. 4 credits.

268 Twentieth-Century China
Prerequisite: one history course numbered between 100 and 166
Investigating, interpreting and debating China’s turbulent twentieth century experience. Following an intensive introduction to Chinese history and approaches to historical analysis, students will embark upon an examination of the extraordinary political, social and cultural transformations of this century through a series of case studies structured largely around sets of primary source documents. 4 credits.

271 Korean History and Culture Today
Exploration of how South Koreans are reconstructing their own independent historical narrative today. How are they interpreting their past in light of Chinese and Japanese influences? Sources include presentations at South Korea’s impressive new museum system and the ten spectacular UNESCO World Heritage Sites located throughout the country. May Experience ONLY. 2 credits.

307 Life on the Margins in Early Modern Europe
Prerequisite: one history course numbered between 100 and 166
Major topics in this social history of early modern Europe will include women and the family, poverty and social welfare, disease and health care, criminality and punishment. Special attention will be given to experiences on the “margins” of society. 4 credits.

309 European Women, War and Resistance
Prerequisite: one history course numbered between 100 and 166
The impact of World War II on European women and their service as factory laborers and aid workers, as well as their activism in Resistance movements redefined gender during wartime. Moreover, women were victimized as never before as a result of mass rape, genocide and refugee displacement. Examining the lives of American, British, Italian, French, German, and European Jewish Women from a gendered perspective of war and its impact on women. 4 credits.

310 History of Western Medicine
Prerequisite: one history course numbered between 100 and 166
A survey of illness, health, and medicine in Western society from Antiquity through the development of antibiotics. Examination of the changing relationships between medical theories and practice and address the roles of practitioners, patients, and institutions. Discussion of the changing ideas surrounding disease causation, the growth of public health measures, health care institutions, and public policies concerning disease and medicine. Experiences of health, illness, prevention, and treatment, while exploring the various social, cultural, political, and economic dimensions of these issues will also be considered. 4 credits.

315 Historiography
Prerequisite: one history course numbered between 100 and 166
Exploration of the definition of historiography and studies of varying schools of historiographic interpretation. 4 credits.

321 History of Urban and Suburban America
Prerequisite: one history course numbered between 100 and 166
American Cities and Suburbs. Historical sources of growth and decline; dynamics of natural and built environments; neighborhoods and social space; factors of gender, class, and ethnicity; migration; urban exchange networks, hinterlands and suburbs; historical mechanisms of political power, urban planning; and cultural production. Emphasis on the nineteenth and twentieth centuries. 4 credits.

322 Simulating Historic Communities in Visual Space
Prerequisite: one history course numbered between 100 and 166
Application of architectural modeling, GIS, and gaming technologies to simulation of historic communities in virtual reality. Collection and interpretation of local history evidence. Introduction to virtual modeling tools. Theories of interpretation. Focus on case studies of selected historical communities. Students will construct final projects based on these case study communities. May Experience ONLY. 2 credits.

323 Episodes in North American Urban History
Prerequisite: one history course numbered between 100 and 166
Sustained historical analysis of a particular event or theme relating to the urban history of selected cities in the United States, Canada, and/or Mexico. Consideration of urban historiography, approaches to community and local history, spatial dimensions, historical memory, and comparative history. May Experience ONLY. 2 credits.

350 Travel Study in China
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Investigation of key events, movements, individuals and ideas in Chinese history. Specific topics and periods to be determined by the instructor in conjunction with the China travel study program. 4 credits.
351 Travel Study in Africa
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Investigation of key events, movements and individuals in a particular region of Africa. Specific topics and periods to be determined by the instructor in conjunction with the Africa travel study program. 4 credits.

352 Travel Study in Latin America
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Investigation of key events, movements and individuals in one or more regions of Latin America. Specific topics and periods determined by the instructor in conjunction with the Latin America travel study program. 4 credits.

355 Travel Study in India
GER: HA (Historical Analysis of Human Interactions) and WC (World Cultures)
Focus on interactions between various players in India’s complex political and sociocultural past over the last 500 years. Mughal, British, nationalist, and postcolonial periods are addressed. India as both a product and producer of long-distance trade, migration, power plays, and global influence. 4 credits.

356 Travel Study in Eastern Europe
GER: HA (Historical Analysis of Human Interactions)
Prerequisite: one History course numbered between 100 and 166
Investigation of key events, movements and individuals that have shaped the history of the region which includes the former Holy Roman Empire, German, Austro-Hungarian and Russian Empires since the later Middle Ages. Specific topics and periods to be determined in conjunction with the Eastern Europe travel study program. 4 credits.

357 Travel Study in the Mediterranean
GER: HA (Historical Analysis of Human Interactions)
Prerequisite: one History course numbered between 100 and 166
Investigation of key events, movements and individuals in the Mediterranean region. Specific topics and periods to be determined by the instructor in conjunction with the Mediterranean study away program. 4 credits.

358 Travel Study in Lowcountry South Carolina
GER: HA (Historical Analysis of Human Interactions)
Lowcountry South Carolina from precolonial times to present. Topics include Charleston and the Atlantic world before 1820; Gullah culture; southern sectionalism and Civil War; myth, memory and historiography; tension between tradition and rapid change in the twentieth century. 4 credits.

359 Travel Study in the United Kingdom and Ireland
GER: HA (Historical Analysis of Human Interactions)
Investigation of key events, movements and individuals in the United Kingdom and Ireland. Specific topics and periods to be determined by the instructor in conjunction with the United Kingdom and Ireland study abroad program. 4 credits.

465 Experiential Learning in Local History
Prerequisite: instructor permission
Use of experiential learning to examine local history. Through internships and project-oriented assignments, students apply their academic training in a professional setting or produce scholarly projects for a public audience. Weekly seminar focusing on local history with a culminating, formal presentation required. Variable credit.

475 Senior Seminar in History
Required course for all majors. Discussion-based meetings will explore a specific historical topic and the related historiography. Students will conceive, design, and execute their own research project connected to the main topic of the seminar. All seminars include an assignment encouraging students to integrate and to reflect upon their varied classroom, travel study, and internship experiences over the course of the major. 4 credits.

501 Independent Study
Prerequisite: instructor permission
majors may pursue an independent study project in cooperation with any member of the department. Topics and the type of project will vary with the interests of individual students. Variable credit.
Interdisciplinary Studies

Interdisciplinary Studies (IDS) Courses

230 Ideas in the Arts
GER: VP (Visual and Performing Arts)
Investigation of certain ideas and how they manifest themselves in drama, visual arts, and music. 4 credits.

240 Human Sexuality
This survey course in human sexuality will have an interdisciplinary focus, emphasizing biological, psychological, and sociological perspectives. Historical, cross-cultural, religious, philosophical, ethical, and legal issues will also be considered. 4 credits.

259 E-Merging: Learning Technologies
Prerequisite: permission of instructor
Exploring, through culture and concepts, the implications of information and communications technologies for what it means to learn and to know. Students experiment with collaboration, networking, concept mapping, and self-organization in individual and group projects. Requirements include participation in electronic discussion forums, presentations, multimedia projects, journals, and essays. Variable credit.

301 Field Work in Medicine
Prerequisite: PHL-101, SOC-101 and instructor permission
Extensive observation in the medical arena. Observations in several units of a local hospital, a psychiatric facility and at private homes and/or nursing home facilities with a hospice care organization. Emphasis is placed on the sociological and philosophical interpretations of observations. Only available with PHL-302 and SOC-234 by application only. 2 credits.

310 Pathophysiology
Prerequisite: BIO-111 and HES-101
Study of human pathophysiology emphasizing dynamic aspects of disease, underlying mechanisms, and the role of pharmacotherapy, physical activity, and nutrition in disease prevention and management. Laboratory activities include clinical experiences at Greenville Memorial Hospital and patient simulation software as well as basic experiments and clinical assessments. 4 credits.

370 England
8 credits.

371 Twenty-First Century England
4 credits.

372 Survey of European Issues
Survey of history, politics, economics, and culture of the European continent. Content will include appropriate readings, guest lectures by European experts, structured group travel to selected sites, and independent travel assignments. Open only to students participating in the Brussels travel study program. 4 credits.

373 Survey of Scottish Issues
Survey of history, politics, economics, and culture of Scotland. Including appropriate readings, guest lectures, structured group travel to selected sites, and independent assignments. Open only to students participating in the Edinburgh travel study program. 4 credits.

509 StudioLab Independent Research
Prerequisite: IDS-259
Intended to provide a research component for students working as StudioLab consultants. Students develop and focus intensively on a specific research project with the approval and oversight of a faculty supervisor. Students develop objectives for the project, research and read relevant materials, submit weekly journals and reflective summaries, attend meetings with the faculty supervisor, and complete and present the final project. Variable credit.

Humanities (HUM) Courses

Through the methods of historical, literary, philosophical and religious appreciation, humanities courses examine dominant ideas in Western culture and their influence on social, political, economic, scientific, religious and psychological events and movements.

201 History of Ideas in Context I
GER: Dependent on topic; consult term-specific course listings
Texts and ideas from a variety of disciplines and genres including the humanities, fine arts, and political philosophy in both Western and non-Western cultural contexts. Topics will vary. 4 credits.

202 History of Ideas in Context II
GER: Dependent on topic; consult term-specific course listings
Texts and ideas from a variety of disciplines and genres including the humanities, fine arts, and political philosophy in both Western and non-Western cultural contexts. Topics will vary. 4 credits.

301 Issues in the Humanities
GER: TA (Textual Analysis)
Topic and themes vary each year. All versions of the course address fundamental aspects of the humanities: the role of interpretation in culture; the media and genres in which language is expressed; the way in which the humanities shape and are shaped by other dimensions of culture. 4 credits.
507 International Internship
Internship with non-U.S. legislative body, NGO, or private company while participating in a faculty led study away program. Weekly meetings and assignments appropriate to the location and specific program. If placement is appropriate, the faculty director may be able to arrange credit in the student’s major department. Variable credit.

May Experience (MXP) Courses

120 Storytelling
Prerequisite: instructor permission
An analysis of oral storytelling in various genres, asking the question, “What makes a good story?” Students will have the opportunity to try their own skills as raconteurs in classroom and public venues. Practical application of storytelling in various fields will also be discussed. May Experience ONLY. 2 credits.

130 Virtual Identities
Students will explore what it means to construct, present and experience the self as avatar. They will investigate decisions people make in identity creation, possible reasons behind the decisions, and the impact these choices have on an individual’s behavior and interactions in a virtual environment. May Experience ONLY. 2 credits.

140 Just Eating: Considering Sustainable Food Practices
This class will explore three popular strategies of sustainable food systems: diets based on organic, vegetarian and/or local agriculture. Students will be asked which aspects are truly beneficial to the individual, the environment, and society; and which aspects are just “greenwashing” or lead to unexpected consequences. To answer these questions, the class will engage in a rigorous examination of the sustainability of food through readings, movies, speakers, visiting local farms and markets, and hands-on experiences. Students will be required to evaluate and synthesize information from diverse sources, including their own experiences. Each student will be encouraged to develop his/her own ethic of being a food consumer. May Experience ONLY. 2 credits.

143 Yoga in America
History of yoga and its proliferation into American culture. Students will read excerpts from foundational yoga texts including the Bhagavad Gita, The Upanisads, and The Yoga Sutras of Patanjali, and consider the recent popular text Subtle Body: The Story of Yoga in America as one explanation of how American gurus have reinvented traditional yoga to fit into the American lifestyle. Daily yoga practice, class discussions, weekly reflective writing, and a video research project will be required. May Experience ONLY. 2 credits.

150 Muggles & Mudbloods: The Sociology of Harry Potter
The first segment will center on using the world of Harry Potter as a lens to illustrate and examine sociological theories, concepts, and issues, such as race, class, gender, and religion. The second segment will then investigate whether and how the Harry Potter series, as a social phenomenon, has impacted some of these issues in the real world. May Experience ONLY. 2 credits.

157 The Sociology of The Simpsons
This course will begin with a brief discussion of The Simpsons as a social and cultural phenomenon. The remainder of the course will focus on The Simpsons (and the social commentary embedded in it) as a tool for analyzing sociological concepts. May Experience ONLY. 2 credits.

160 Design for Social Change
An experiential learning course that immerses students in the revitalization of the Poinsett District, an urban corridor in Greenville, SC. Students will learn how to effectively use the human-centered design thinking process by engaging with community partners to research, prototype and test implementable solutions for problems that are uncovered. The expectation is that the student created projects will be implemented in communities on the Poinsett Corridor and will have a lasting effect beyond the life of the course. Students will walk through the process of design thinking to create a tangible outcome. May Experience ONLY. 2 credits.

210 Introduction to the Alexander Technique
The course familiarizes students with the Alexander Technique, an approach to body awareness, mapping, and ease of movement, specifically but not exclusively designed for performers. It emphasizes the role of anatomy in developing an understanding and application of the principles of Alexander Technique. This active and scholarly exploration of the Alexander Technique is designed to unlock creativity, discover freedom and ease in performance, reduce stress and tension throughout the body, and prevent performance related injuries. May Experience ONLY. 2 credits.

212 Soccer and Society
Examination of a number of contemporary social, political and economic issues through the lens of soccer. Major topics of discussion will include nationalism and sectarian violence, the impact of globalization on local societies, the success or failure of assimilation, patterns of global labor migration, and issues related to gender and sport. May Experience ONLY. 2 credits.
251 Applied Study of Sports Analytics  
Prerequisite: any MR (Mathematics and Formal Reasoning) requirement and instructor permission  
An examination that will focus on developing and evaluating statistical tools for analyzing various aspects of sports. Will investigate the increasing use of and concurrent resistance to analytics in sports. May Experience ONLY. 2 credits.

260 Botswana: Paradox and Profession  
Examination of cultural factors affecting HIV/AIDS and a variety of programs in Botswana designed to prevent its spread and provide treatment. Exploration of the question of vocational calling will also take place when meeting government officials, Peace Corp Volunteers, and NGOs workers. May Experience ONLY. 2 credits.

265 Japan from Periphery to Center  
Exploration of the uneven development in modern Japan. Travel to a region long considered a periphery of Japan, Okinawa, and its undisputed center, Tokyo. The contrast between Okinawa, hosting American military bases and boasting the highest levels of unemployment, and Tokyo, the undisputed center of economic, political and cultural life, is striking. Visual representations of the heterogeneity of social experience in contemporary Japan will be a focal point. May Experience ONLY. 2 credits.

400 Global Issues Forum - Human Rights  
Interdisciplinary and collaborative research on an issue of global importance, human rights. Development of leadership skills by determining ways to act, and to motivate others to act, on the issue. May Experience ONLY. 2 credits.

433 Communication, Culture & Identity in New Zealand  
Travel study program to New Zealand examining the role of mass media in shaping and reviving the identity of its inhabitants as Maori, Pakeha, and New Zealanders. Readings will help to understand the historical context for the emergence of these identities. Students will visit museums, education centers, and Maori cultural sites, as well as radio and television stations in Auckland, Wellington, and Christchurch. They will also meet with prominent scholars and with New Zealand politicians who make broadcast policy. These contacts, along with the assigned readings, will prepare students for writing assignments in which they analyze the impact of media institutions and practices on the creation of identity. May Experience ONLY. 2 credits.

Science (SCI) Courses

101 Mission to Mars  
GER: NW (Empirical Study of the Natural World)  
An interdisciplinary analysis of plans to develop a manned space mission to Mars from a physical science perspective, with a focus on experimentation, historical contributions, and the relationship between science and society. 4 credits.

102 Living, Changing Planet Earth  
GER: NW (Empirical Study of the Natural World) and NE (Humans and the Natural Environment)  
Prerequisite: SCI-101  
Major discoveries and controversies in biology and earth science are analyzed with reference to their history, scientific basis, public perception, and impact on planet earth. 4 credits.

150 Introduction to HHMI (Howard Hughes Medical Institute) Undergraduate Research  
Prerequisite: instructor permission  
Opportunities for HHMI program participants and other interested students to learn about interdisciplinary research in the sciences. 1 credit.

502 Interdisciplinary Research  
Variable credit.

Interdisciplinary Minors

Interdisciplinary minors allow students to supplement their major by grouping elective courses to focus on a particular topic from the perspective of different academic disciplines. In general, an interdisciplinary minor consists of four to six courses (16-24 credits) of related course work selected from no fewer than three departments. At least 12 of the required credits will be in courses beyond the introductory level. An interdisciplinary minor may be enrolled in addition to a major. A student must only meet the requirements of the minor of interest. In general, these courses may be enrolled at any time during a student’s program at Furman and in any order. Students may declare an interdisciplinary minor at any time.

Furman currently offers ten of these interdisciplinary minors: African American and African Diaspora Cultures, Ancient Greek and Roman Studies, English for Speakers of Other Languages, Environmental Studies, Latin
American Studies, Film Studies, Middle East and Islamic Studies, Poverty Studies, Science Education and Women’s, Gender, and Sexuality Studies.

**African American and African Diaspora Cultures**
Chair: Cherie Maiden, Modern Languages & Literatures

To satisfy requirements for the African American and African Diaspora minor, students must successfully complete four to six courses from at least three different departments, to include:

- ADC-475,
- HST-229 or ENG-453, and
- at least two more courses from the following

For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.

ANT-201 Peoples of Latin America
ANT-302 Anthropology of Ethnicity
COM-411 African-American Rhetoric
COM-435 Race, Gender, Class in the Media
ENG-403 Faulkner
ENG-422 Literature of the South
ENG-453 African American Literature
ENG-454 Caribbean Cosmopolitanism
HST-224 The American Civil War Era
HST-229 The African American Experience
HST-236 The South
HST-237 South Carolina
PHL-240 Africana Philosophies
PSC-204 Civil Rights and the U.S. Constitution
PSC-208 Urban Politics
PSC-209 Southern Politics
PSC-210 Interest Groups and Political Movements
PSC-211 Race and Ethnic Politics
REL-232 African-American Religious History
SOC-223 Urban Community
SOC-251 Social Movements and Collective Behavior

**African American and African Diaspora Cultures (ADC) Course**

**475 Capstone Seminar**
Interdisciplinary seminar will explore both classical and contemporary issues in cultures of people of African descent outside of Africa. The critical and interpretive perspectives employed and the topics studied will vary with the specialties of the teaching faculty. 4 credits.

**Ancient Greek and Roman Studies**
Chair: David Spear, History

Ancient Greek and Roman Studies refers to those disciplines which study the culture, civilization and heritage of Greece and Rome from roughly the Bronze Age (3000-1000 B.C.) to the fifth century A.D., and those parts of the Mediterranean basin, Europe, Africa and Asia where these ancient civilizations either originated or spread. The minor includes disciplines that critically engage ideas and themes that originated in the classical world and which profoundly influenced later thinkers and institutions.

To satisfy the requirements for a minor in Ancient Greek and Roman Studies, students must complete at least five courses from at least three different disciplines in two or more of the participating departments (Classics, Art, Communication Studies, History, Philosophy, Political Science, Religion, and Theatre Arts), to include:

- a single course in Classics, Greek or Latin numbered 200 or greater,
- at least four more courses (16 credits) from the following list, and
- two capstone essays considering the Ancient Greek and Roman world

Other courses, such as first year seminars, study away programs, and May experiences, may be considered on a case-by-case basis. GRK-201 (Intermediate Greek) or LTN-201 (Intermediate Latin) are recommended but not required. For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.
ART-230
Arts of the Ancient World I: Egypt, Near East and Greece
ART-231
Arts of the Ancient World II: Etruscans and Rome
ART-234
Early Christian and Byzantine Art
CLS-111
Introduction to Classics
CLS-120
Mythology
CLS-211
Classical Archaeology
CLS-220
Greek Civilization
CLS-221
Roman Civilization
CLS-230
Reading Greek Literature
CLS-231
Reading Latin Literature
CLS-320
Travel Study in Classical Civilizations
COM-201
Introduction to Rhetoric
COM-311
Rhetoric in the Ancient World
GRK-201
Intermediate Greek
GRK-210
Greek New Testament
GRK-220
Koine and Hellenistic Greek
GRK-231
Greek Epic
GRK-232
Greek Drama
GRK-233
Greek Prose
HST-101
Ancient Europe and the Mediterranean
HST-201
The “Fall” of Rome
LTN-201
Intermediate Latin I
LTN-202
Intermediate Latin II
LTN-231
Literature of the Roman Republic
LTN-232
Literature of the Augustan Age
LTN-233
Literature of the Roman Empire
LTN-234
Literature of the Late Antique and Medieval Period
PHL-201
Ancient Philosophy
PSC-103
Introduction to Political Thought
PSC-270
Classical Political Thought
REL-112
New Testament and Early Christianity
REL-318
Jesus and the Gospels
REL-319
Paul’s Life and Thought
REL-269
Art and Religion in Turkey
REL-270
Religious Studies in Turkey
THA-210
Theatre History I

**English for Speakers of Other Languages**
Chair: Jerry Cox, Modern Languages and Literatures

To satisfy the requirements for the minor in English for Speakers of Other Languages, students must complete:

- EDU-501, ENG-362, LNG-210, MLL-350, and
- two more courses from at least two of the four groups listed below.

For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.

**Cultural Analysis:**
A course selected in consultation with the minor advisor that addresses the culture associated with a specific language. For example, if a student is interested in working in China then one of several courses addressing aspects of Chinese culture might be considered as appropriate under this rubric.

**Analysis of English:**
ENG-361 History of the English Language

**Linguistic Analysis:**
LNG-220 Linguistic Analysis
LNG-230 Language as Social Phenomenon
LNG-305 Second Language Learning and Acquisition

**Analysis of Modern Languages:**
FRN-405 Introduction to French Linguistics
GRM-405 Introduction to German Linguistics
SPN-405 Introduction to Spanish Linguistics

**Environmental Studies**
Chair: Gregory Lewis, Biology

To satisfy the requirements for the minor in Environmental Studies, students must complete:

- EES-112,
- EST-301, and
- at least four credits from each of the three groups listed below, eight of which must be above the introductory level and only four of which may contribute to the student’s major.

For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.

**Social Sciences:**
ANT-303 Cultural Ecology
AST-260 Environment and Health in India
BUS-312 Sustainable Corporation
ECN-234 Urban Economics
processing of high grade biodiesel from waste vegetable oil. Course will include weekly discussions concerning alternative fuels and environmental issues. 0 credits.

### 301 Environment and Society

**GER: NE (Humans and the Natural Environment)**

Interdisciplinary examination of the causes, potential solutions and ethical dilemmas associated with environmental problems on various spatial, temporal, political and social scales (individual to global). 4 credits.

### Film Studies

Chair: Vincent Hausmann, English

To satisfy the requirements for the minor in Film Studies, students must complete:

- FST-202, and
- at least twelve more credits from the list below, with at least two departments represented.

No more than one first year seminar may contribute to minor requirements.

For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.

#### Environmental Studies (EST) Courses

**001 Biodiesel Production**

Provides students with a working knowledge of biodiesel production, including basic organic chemistry, safety considerations, logistics, and economics, through the weekly processing of high grade biodiesel from waste vegetable oil. Course will include weekly discussions concerning alternative fuels and environmental issues. 0 credits.
Film Studies (FST) Courses

202 Reading Film/Introduction to Film Analysis
*GER: Dependent on version; consult term-specific course listings*
Distinctive ways that film conveys and generates meaning. Tools to critically analyze films by examining the basics of film form, style (mise-en-scene, camera angle and movement, editing, and sound), and genre. The course also will explore the characteristic features of -- as well as alternatives to -- the “classical Hollywood style,” a series of formal and narrative conventions present in films as distinct as Steven Spielberg’s War of the Worlds (2005) and John Ford’s 1939 western, Stagecoach. 4 credits.

360 Italian Film
*GER: VP (Visual and Performing Arts)*
An examination of the apex of Italian cinema from the emergence of neorealism, through the works of the great Italian auteur directors including Fellini, Antonioni and Pasolini to the present. Students will learn how Italian film represented Italian history, politics, and culture. Of particular importance for the class will be to show how the tradition of Italian neorealism carried on from the 1940s until the 1960s and shows signs of a resurgence in contemporary Italian film. 4 credits.

365 Auteur Film
*GER: VP (Visual and Performing Arts)*
An examination of the concept of auteur (author) film production that focus on the unique stylistic elements of films based on the film director’s aesthetics and worldview. The course looks at the films of many of the main individuals, both inside and outside of Hollywood, who are considered auteur directors such as John Ford, Billy Wilder, Ingmar Bergman, Alfred Hitchcock, Akira Kurosawa, Federico Fellini, Jean-Luc Godard, Stanley Kubrick, Woody Allen, Pedro Almadovar, Spike Lee, Zhang Yimou, and Wong Kar Wai. 4 credits.

Latin American Studies (LAS) Courses

470 Issues of Latin America
Capstone course for the Latin American Studies concentration. Thematic focus varies depending on interest and expertise of the instructor. Past topics have included sustainable development, current politics, and the intersection of literature and history. Course is taught in English and is recommended for juniors and seniors. 4 credits.

Middle East and Islamic Studies
Chair: Alfons Teipen, Religion

To satisfy the requirements for the minor in Middle East and Islamic Studies, students must complete:
- at least one course from each of the participating disciplines,
- no more than two courses from any of the participating disciplines, and
- MES-401.

For course descriptions, see listings under individual departments. On occasion, special
topics courses are offered that also satisfy the requirements for the minor.

History:
- HST-151 Early Middle East
- HST-152 Islamic Empires: Ottomans, Safavids, Mughals
- HST-153 Modern Middle East
- HST-203 Crusades
- HST-251 Jews and Christians of the Islamic Lands

Political Science:
- FYS-1218 Islam, Women and Media
- PSC-225 Politics of the Middle East

Religion:
- FYS-1202 Jerusalem: One City, Three Faiths
- REL-222 Introduction to Islam
- REL-322 Muhammad and the Qur'an
- REL-323 Women, Gender, Islam

Middle East and Islamic Studies (MES) Courses

401 Middle East and Islamic Studies Capstone Seminar
Explorations of the Middle East and Islam from multiple perspectives including extensive research paper asking students to integrate distinct methodological and substantive elements from other courses. 4 credits.

Poverty Studies
Chair: David Gandolfo, Philosophy

To satisfy the requirements for the minor in Poverty Studies, students must complete:
- PVS-101,
- an internship, and
- at least five more courses from the following, with no more than two from any one discipline, which must include at least one course from either economics or political science.

No more than one May Experience may contribute to minor requirements.

The poverty studies internship must deal directly with people living in poverty and must be completed as an 8-10 week full-time summer experience. Normally, the internship will be undertaken after successful completion of PVS-101 Introduction to Poverty Studies and completed prior to the beginning of the junior year. Sites must be approved by the Poverty Studies Coordinator and Furman’s Internship Program Director.

For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.

- AST-250 Human Development in Contemporary Asia
- AST-282 Poverty, Gender and Development in India
- ECN-233 Economics of Gender
- ECN-237 Economics of Poverty and Inequality
- ECN-243 Economic Growth and Development
- EDU-111 Perspectives on American Education
- EDU-115 Depiction of Schools on Film
- FRN-445 French Black Novelists
- HST-142 Modern Latin America
- HST-145 History of Africa
- HST-233 American Immigration History
- HST-308 Childhood and Child Welfare in the Modern World
- HST-352 Travel Study in Latin America
- MLL-245 African Literature
- MLL-280 Social Justice and Immigration
- PHL-171 Themes in Global Justice
- PHL-260 Latin American Philosophy
- PHL-270 Africana Philosophies
- PHL-304 Ethics of Globalization
- PHL-310 Social and Political Philosophy
- PSC-204 Civil Rights and the U.S. Constitution
- PSC-205 Public Policy and Administration
- PSC-208 Urban Politics
- PSC-211 Racial and Ethnic Politics
- PSC-223 Politics of Developing Nations
- PSC-224 Politics of Africa
- PSC-226 Politics of China
- PSC-228 Politics of South Asia
- PSC-229 Politics of Asia
- PSC-230 Politics of Latin America
- PSC-256 International Political Economy
- PSC-515 Poverty and the Law
- PSY-280 Poverty and Child Development
- PVS-101 Introduction to Poverty Studies
- PVS-102 Living in Poverty
- REL-340 Faith and Ethics
- SOC-223 Urban Community
- SOC-241 Social Class in America
- SOC-243 Race and Ethnic Relations
- SOC-260 Global Health Inequities
- SPN-240 Latin American Civilization
Poverty Studies (PVS) Courses

**101 Introduction to Poverty Studies**
Explorations of poverty from multiple perspectives: definition, scope, and measurement; experiences and effects of living in poverty; individual and structural causes; rights, claims, and obligations regarding poverty; successes and failures in the alleviation of poverty; current proposals for addressing poverty. 4 credits.

**102 Living in Poverty: Orientation to PVS Internships**
Readings, lectures, field experiences, community speakers, and critical reflection to assist students who are considering internships associated with the Poverty Studies concentration or other similar experiences. May Experience ONLY. 2 credits.

Science Education
Chair: Michael Svec, Education

To satisfy the requirements for the minor in Science Education, students must complete, at least 20 credits in three or more disciplines, including:

- EDU-464,
- eight to fourteen credits from the following list of general options
- two to eight credits from the following list of teaching experiences.

One May Experience course and one first year seminar may contribute to the minor when the topic has been deemed appropriate by the Science Education oversight committee. No more than one course may also contribute to meeting the requirements in another major field of study. No more than eight credits in introductory courses (first year seminars or courses numbered between 100 and 199) may contribute to the minor.

General:
- COM-101 Public Speaking
- COM-351 Advocacy
- CSC-271 Morals, Laws and Society in a Digital Age
- EDU-120 Human Growth and Development
- EDU-221 Education of Students with Exceptionalities
- PHL-320 Philosophy of Science
- PSC-210 Interest Groups and Political Movements
- PSC-315 Media and Politics
- PSY-211 Childhood and Adolescence
- PSY-213 Adulthood and Aging
- REL-361 Religion and Science
- REL-362 Religion and the Environment
- WGS-240 Women in Science

Teaching Experiences:
- BIO-461 Teaching Methods and Materials in Biology
- CHM-461 Teaching Methods and Materials in Chemistry
- CSC-476 Teaching Methods in Computer Science
- EDU-333 Science in Grades PK-6
- EDU-454 Teaching Science in Grades 9-12
- EDU-465 Informal Science Education
- PHY-461 Teaching Methods and Materials in Physics

For course descriptions, see listings under individual departments. On occasion, May Experiences, first year seminar, and/or temporary topics courses are offered that also satisfy the requirements for the minor.

Women’s, Gender, and Sexuality Studies
Chair: Karni Bhati, English and Sofia Kearns, Modern Languages and Literatures

To satisfy the requirements for the minor in Women’s, Gender, and Sexuality Studies, students must complete:

- WGS-230 or WGS-250, and
- at least four courses in at least three different disciplines from the list below.

One first year seminar may contribute to the minor when the topic has been deemed appropriate by the Women’s, Gender, and Sexuality oversight committee. A seminar applied to minor requirements will not be considered for disciplinary distribution purposes. In addition, students must complete

Courses equivalent to Women’s, Gender, and Sexuality offerings completed elsewhere and independent study on an appropriate topic may contribute to the minor if no more than once each and must be approved by the Women’s, Gender, and Sexuality oversight committee.
For course descriptions, see listings under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST-255</td>
<td>Poverty, Gender &amp; Development in India</td>
</tr>
<tr>
<td>ART-252</td>
<td>Women and the Arts</td>
</tr>
<tr>
<td>COM-412</td>
<td>International Women’s Rhetoric</td>
</tr>
<tr>
<td>COM-435</td>
<td>Race, Gender, Class in the Media</td>
</tr>
<tr>
<td>ECN-233</td>
<td>Economics of Gender</td>
</tr>
<tr>
<td>ENG-324</td>
<td>Women of Restoration Theater</td>
</tr>
<tr>
<td>ENG-374</td>
<td>Stardom and Identity</td>
</tr>
<tr>
<td>ENG-405</td>
<td>Studies in Gothic Literature</td>
</tr>
<tr>
<td>ENG-452</td>
<td>Literary Feminism</td>
</tr>
<tr>
<td>ENG-473</td>
<td>Gender in South Asian Literature and Film</td>
</tr>
<tr>
<td>FYS-1134</td>
<td>A Woman’s Place: Balancing Work and Family</td>
</tr>
<tr>
<td>FYS-1144</td>
<td>Critical Identities Studies</td>
</tr>
<tr>
<td>FYS-1172</td>
<td>Queer Economics</td>
</tr>
<tr>
<td>FYS-1192</td>
<td>Sex in America 1950-1990</td>
</tr>
<tr>
<td>FYW-1148</td>
<td>Southern Women: Black and White</td>
</tr>
<tr>
<td>FYW-1159</td>
<td>Veils and Turbans: Whose Modernity is it Anyway?</td>
</tr>
<tr>
<td>HST-215</td>
<td>Women and Gender in European History</td>
</tr>
<tr>
<td>HST-231</td>
<td>History of Women in America</td>
</tr>
<tr>
<td>HST-256</td>
<td>Gender History of South Asia</td>
</tr>
<tr>
<td>HST-309</td>
<td>European Women, War and Resistance</td>
</tr>
<tr>
<td>PHL-312</td>
<td>Philosophy of Gender</td>
</tr>
<tr>
<td>PSC-212</td>
<td>Women and Politics</td>
</tr>
<tr>
<td>REL-317</td>
<td>Feminist Biblical Interpretation</td>
</tr>
<tr>
<td>REL-323</td>
<td>Women, Gender, Islam</td>
</tr>
<tr>
<td>REL-325</td>
<td>Women and Power in Hinduism</td>
</tr>
<tr>
<td>REL-344</td>
<td>Black Liberation and Womanist Theology</td>
</tr>
<tr>
<td>REL-360</td>
<td>Women and Religion in the West</td>
</tr>
<tr>
<td>REL-363</td>
<td>Religion and Sexuality</td>
</tr>
<tr>
<td>SOC-232</td>
<td>Sociology of Contemporary Families</td>
</tr>
<tr>
<td>SOC-242</td>
<td>Sociology of Gender</td>
</tr>
<tr>
<td>SPN-445</td>
<td>Latin American Women’s Literature</td>
</tr>
<tr>
<td>SPN-460A</td>
<td>Readings in Spanish American Literature</td>
</tr>
</tbody>
</table>

**Women’s, Gender, and Sexuality Studies (WGS) Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>230</td>
<td>Issues in Women’s, Gender, and Sexuality Studies</td>
</tr>
<tr>
<td>240</td>
<td>Women in Science</td>
</tr>
<tr>
<td>250</td>
<td>Introduction to Queer Theory and Sexuality Studies</td>
</tr>
<tr>
<td>254</td>
<td>Directed Independent Study</td>
</tr>
</tbody>
</table>

**240 Women in Science**

Study of the obstacles faced by women in science. Topics include: strategies used to overcome obstacles, professional relationships, the “female perspective” and current issues. Group projects will be developed through on-going discussions, selected readings, and individual research. 4 credits.

**250 Introduction to Queer Theory and Sexuality Studies**

**GER: TA (Critical, Analytical Interpretation of Texts)**

Prerequisite: any first year writing seminar

Study of Foucault, Butler, Sedgwick, Anzaldua, Edelman, Mercer and Ferguson among others to understand what it means to say that sexuality has a history and that it is socially constructed. Topics include the ways queer theory problematizes the connections among sex, gender, and sexuality; modern lesbian, gay, and transgendered movements; and anti-identitarian alternatives to normative sexual regimes. 4 credits.

**254 Directed Independent Study**

Under the supervision of a Women’s, Gender, and Sexuality Studies faculty member, a student may develop a proposal for extensive study on a topic of special interest. The proposal must be approved by the Women’s, Gender, and Sexuality Studies oversight committee. Project culminates in a paper, presentation, performance or other appropriate activity. Variable credit.

**230 Issues in Women’s, Gender, and Sexuality Studies**

Focus on both classical and contemporary issues in Women’s, Gender, and Sexuality Studies. Survey of feminist theory and historical developments in the women’s movement, it provides a foundation for the understanding of contemporary women’s issues, including education, family, health, religion, economics and politics. 4 credits.
Mathematics

Professors: Cook, Fray, J.M. Harris, Lewis, Rall, Shell, Sherard, Slaughter, Woodard (Chair)
Associate Professor: Frick, Hutson
Assistant Professors: Bouzarth
Visiting Assistant Professor: D. Smith

Mathematics offers a major in mathematics and two interdisciplinary majors, computing and applied mathematics (jointly with Computer Science), and mathematics-economics (jointly with Economics).

Mathematics Major

To graduate with a major in mathematics, a student must have at least a 2.00 grade point average for all mathematics courses enrolled (excluding MTH-110, 241, 301, and 302). A major normally consists of 11 courses in mathematics beyond MTH-150 and must include:

• MTH-250 and 260,
• MTH-350 or 450,
• MTH-360 or 460, and
• at least seven more from the following: MTH-151, 160, 235, 255, 320, 325, 330, 335, 340, 341, 350, 360, 420, 450, 451, 460, 461 or 504.

For students planning for graduate study in mathematics, the department strongly recommends that in addition to the four required courses the major should include: MTH-255, 450, 451, 460, and 461.

Students planning to teach mathematics in secondary schools must complete a major in mathematics in order to be certified. In addition to the four required courses, the major must include MTH-255, 325, 340, 341, 450, and 460. These students must also successfully complete EDU-111, 120, 221, 350, 455, 460, 472, and EDEP- 670 in addition to the prescribed courses in the major. The requirements for certification (teaching internship) will be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation.

Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

For students planning mathematics-related careers in government service, business or industry, the department strongly recommends that in addition to the four required courses the major should include MTH-255, 335, 340, 341, 350 and at least two courses from MTH-450, 451, or 460. The department also recommends at least one course from CSC-231, 461, or 465.

Computing and Applied Mathematics Major

To graduate with a major in computing and applied mathematics, a student must have at least a 2.00 grade point average for all computer science courses (excluding the recently retired CSC-101) and mathematics courses enrolled (excluding MTH-110, 241, 301, and 302).

Majors must successfully complete:

• all courses in the core: CSC-105, 121, and 122, MTH-141 or 150, and MTH-151, 160, and 250,
• one proof-based course: CSC-261 or MTH-260,
• at least two of the following courses providing in-depth experiences: CSC-361, 363, 461, 502, MTH-330, 340, 360, 450 or 460, and
• at least two more courses from the following focusing on the application of computing or mathematics: CSC-341, 343, 344, 345, 465, MTH-235, 255, 335 or 341.

The four courses meeting the requirements for in-depth experiences and the application of computing and mathematics must be evenly divided between CSC and MTH, two in each discipline.
Mathematics-Economics Major

To graduate with a major in mathematics-economics, a student must have at least a 2.00 grade point average for all economics courses used to satisfy major requirements and at least a 2.00 grade point average for all mathematics courses attempted (excluding MTH-110, 241, 301, and 302).

A major must include:
- ECN-111, 331, 345, 346 and 475,
- at least one more economics course numbered 201 or greater, excluding ECN-225 and 503,
- MTH-151, 160, 250, 340 and 341, and
- at least one more course from the following: MTH-235, 255, 260, 360, 335, or 450.

Mathematics-economics majors are also advised to enroll in CSC-121 and 465.

Mathematics (MTH) Courses

110 Finite Mathematics
GER: MR (Mathematics & Formal Reasoning)
Topics include: set theory, combinatorics, probability, statistics, matrix algebra, linear programming, Markov chains, graph theory, and mathematics of finance. A student cannot receive credit for this course after credit has been received for MTH-260 or any mathematics course numbered 301 or greater. 4 credits.

140 Integrated Precalculus/Calculus I
Prerequisite: appropriate placement
Introduction to the theory and methods of differential calculus. Topics include functions, graphs, limits, continuity and derivatives. May not be enrolled on a pass-fail basis. 4 credits.

141 Integrated Precalculus/Calculus II
GER: MR (Mathematics & Formal Reasoning)
Prerequisite: MTH-140
Introduction to applications of the derivative and the theory and applications of the definite integral. Topics include: trigonometric functions and their derivatives, applications of derivatives, antiderivatives, the definite integral and applications of the integral. 4 credits.

150 Analytic Geometry and Calculus I
GER: MR (Mathematics & Formal Reasoning)
Prerequisite: appropriate placement
First course in the standard calculus sequence. Introduction to the theory, methods, and applications of differential calculus and an introduction to the definite integral. Topics include: algebraic and trigonometric functions, limits and continuity, rules for differentiation, applications of the derivative, antiderivatives, and the definition and basic properties of the definite integral. 4 credits.

151 Analytic Geometry and Calculus II
Prerequisite: MTH-141 or 150
The second course in the standard calculus sequence. An introduction to the logarithmic and exponential functions, the applications of the definite integral, techniques of integration, indeterminate forms, improper integrals, numerical methods, and infinite series. 4 credits.

160 Vectors and Matrices
Prerequisite: MTH-151
Introduction to the theory of vectors and matrices. Among the topics included are: vectors, vector operations, the geometry of Euclidean space, systems of equations, matrices, matrix operations, special transformations, eigenvalues, and applications of matrix theory. 4 credits.

235 Operations Research
Prerequisite: MTH-160
Application of mathematical modeling and analytical methods to make better decisions. Topics include modeling, algorithm design, discrete linear function optimization with linear constraints, convexity, duality, sensitivity analysis, and optimality criteria. 4 credits.

241 Introduction to Statistics
Prerequisite: MTH-110, 141 or 150
Non-calculus based course in elementary probability and statistics. Counting problems, probability, various distributions, random variables, estimation, hypothesis testing, regression and correlation, analysis of variance, and nonparametric methods. A student cannot receive credit for this course after completing MTH-341 or receiving credit for ECN-225. 4 credits.

250 Vector Calculus
Prerequisite: MTH-160
Introduction to multivariate and vector calculus. Topics include vector functions and the differential and integral calculus of functions of several variables including Green’s Theorem and Stokes’ Theorem. 4 credits.

255 Differential Equations
Prerequisite: MTH-160
Introduction to the theory, methods, and applications of ordinary differential equations, including first- and higher-order differential equations, series solutions, systems, approximate methods, Laplace transforms, and phase plane analysis. 4 credits.
260 Introduction to Discrete Mathematics
Prerequisite: MTH-151
Introduction to the main ideas and proof techniques of discrete mathematics. Among the topics covered are mathematical logic, relations, functions, partitions, recursion, induction, combinatorial principles, inclusion/exclusion, enumeration, and introductory graph theory (trees, connectivity, planarity, colorings, etc.). 4 credits.

301 Mathematics for Elementary School Teachers I
Problem solving and mathematical reasoning; sets and set operations; functions; numeration systems; the systems of whole numbers, integers, and rational numbers; algorithms; mental computation; elementary number theory; teaching strategies, materials, and technologies for these topics in grades pre K-6. 4 credits.

302 Mathematics for Elementary School Teachers II
Prerequisite: MTH-301
Decimals and percents; elementary probability; descriptive statistics; geometry of shapes in two and three dimensions; congruence and similarity; measurement; geometric transformations; teaching strategies, materials, and technologies for these topics in grades pre K-6 and field-based experiences in area schools. 4 credits.

320 Number Theory
Prerequisite: MTH-260
Introduction to the arithmetic properties of the integers including divisibility, congruences, diophantine equations, primes and their distribution, quadratic forms and quadratic reciprocity. Additional topics will be chosen from continued fractions, cryptography, partitions, elliptic curves, modular forms and number fields. 4 credits.

325 Modern Geometry
Prerequisite: MTH-260
Development of Euclidean and non-Euclidean geometries. Topics include axiom systems, models, congruence theorems, parallel postulates, and the philosophical and historical background to geometry. 4 credits.

330 Combinatorics and Graph Theory
Prerequisite: MTH-260
A study of the primary methods and fundamental ideas of combinatorics and graph theory. Topics covered include generating functions, set partitions, recurrence relations, inclusion-exclusion, trees, graph connectivity, independence, and graph colorings. Additional topics will be chosen from Ramsey theory, set systems, planarity, directed graphs, matchings, and Hamiltonian and Eulerian graphs. 4 credits.

335 Mathematical Models and Applications
Prerequisite: MTH-250 and 255
A selection of mathematical models using various continuous and discrete methods and having applications in business and the social and biological sciences. Included are ecological models, epidemic models, Richardson’s arms race model, and population growth models. Other topics discussed are linear programming, voting problems, and Markov chains. 4 credits.

340 Probability
Prerequisite: MTH-250
Calculus-based course in probability, covering counting, discrete and continuous probability, random variables, important probability distributions, joint distributions, expectation, moment generating functions, and applications of probability. 4 credits.

341 Mathematical Statistics
Prerequisite: MTH-340
Calculus based course in statistics covering sampling, estimation, hypothesis testing, chi-square tests, regression, correlation, analysis of variance, experimental design, and nonparametric statistics. 4 credits.

350 Complex Variables
Prerequisite: MTH-250
Study of the complex plane and the calculus of functions of a complex variable. Topics to be considered include the algebra and geometry of complex numbers, limits and derivatives of functions of a complex variable, the Cauchy-Riemann equations, contour integrals, Taylor and Laurent series, and residues. 4 credits.

360 Linear Algebra and Matrix Theory
Prerequisite: MTH-160 and 260
Study of finite dimensional real vector spaces, linear transformations, determinants, inner product spaces, eigenvalues and eigenvectors. 4 credits.

420 Topology
Prerequisite: MTH-260
Introduction to concepts in topology including the following: topological spaces, metric spaces, continuity, homeomorphisms, neighborhoods, closed sets and closure, basis and sub-basis for a topology, subspaces, product spaces, connectivity, compactness, and separation axioms. 4 credits.

450 Real Analysis
Prerequisite: MTH-260
A theoretical introduction to some of the basic ideas of real analysis: real numbers and the topology of the real line, sequences and series of real numbers, limits of functions, continuity, uniform continuity, differentiation, the Riemann integral, and sequences and series of functions. 4 credits.

451 Topics in Analysis
Prerequisite: MTH-450
An in-depth investigation of selected topics in analysis. 4 credits.
**460 Modern Algebra**  
Prerequisite: MTH-260  
A theoretical introduction to some of the basic ideas of modern abstract algebra. Included is a study of groups, rings, domains, polynomial rings and fields as well as an investigation of their sub-structures and of the fundamental homomorphism theorems. 4 credits.

**461 Topics in Algebra**  
Prerequisite: MTH-460  
An in-depth investigation of selected topics in abstract algebra. 4 credits.

**504 Directed Independent Study**  
Study of an area of mathematics of interest to the student that is not part of one of the listed courses. The student must choose a faculty member to direct the study and, together with this faculty member, prepare a description of the material to be covered and submit it to the department chair for approval. May only contribute to major requirements at discretion of the chair. Variable credit.

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**Military Science**

Professor: Gilleran  
Associate Professor: H. Anderson  
Assistant Professor: W. Price  
Instructors: Cobb, Cortes, Johnson

The Reserve Officers’ Training Corps (ROTC) courses prepare young men and women to become leaders as commissioned officers in the U. S. Army, Army Reserve or Army National Guard.

Students seeking a commission must:

- complete the basic course sequence by the end of the sophomore year, consisting of: MSL-101, 102, 111 (required for all contracted cadets), 201 and 202 or receive credit for the Leader’s Training Course (LTC), JROTC, or successful prior service with the U.S. Army,
- complete the advanced course sequence, consisting of: MSL-301, 302, 401 and 402
- complete the 32-day Leader Development and Assessment Course (LDAC) at Fort Lewis, Washington, between the junior and senior years,
- pass the Army Physical Fitness Test (APFT),
- pass both the basic commissioning swim test and the Combat Water Survival Test (CWST),
- meet or exceed all university degree requirements.

Any student may take basic courses during their freshman and sophomore years (MSL-101, 102, 111, 201 and 202) without incurring a military obligation. Courses numbered 301 and greater are open to contracted ROTC cadets only.

**Military Science Leadership (MSL) Courses**

**101 Introduction to Leadership I**  
Introduction to challenges and competencies critical for effective leadership. Development of life skills such as goal setting, time management, physical fitness, and stress management as they relate to leadership, officership, and the Army profession. 0 credits.
102 Introduction to Leadership II
Overview of leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. Exploring dimensions of leadership values, attributes, skills, and actions in the context of practical, hands-on, and interactive exercises. 0 credits.

111 American Military History
Historical perspective on decisions made by American military leaders and study of major military engagements from the colonial period through the current operating environment. Examination of motivational devices, battle strategies, rules of engagement, supply management, transportation, and logistics. Review of approaches officers used throughout history to lead their troops into battle and inspire them to victory that cadets can continue to employ today. Limited to freshman and sophomores interested in participating in the ROTC program. 4 credits.

201 Foundations of Leadership I
Explorations of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practiced by planning, executing and assessing team exercises and participating in leadership labs. 2 credits.

202 Foundations of Leadership II
Examination of the challenges of leading tactical teams in the complex Contemporary Operating Environment (COE). Highlighting dimensions of terrain analysis, patrolling, and operation orders. Continued study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. Cadets develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. 2 credits.

301 Tactical Leadership
Study, practice, and evaluation of adaptive team leadership skills learned throughout the first two years of the Military Science Leadership program while presented with the demands of the ROTC Leader Development and Assessment Course (LDAC). Challenging scenarios related to small unit tactical operations are used to develop self awareness and critical thinking skills. Systematic and specific feedback on leadership abilities within the 23 leadership dimensions. 2 credits.

302 Applied Leadership
Continued development and preparation for the demands of ROTC Leader Development and Assessment Course (LDAC). Serves as the final evaluation of the Cadets’ leadership philosophy, style and character prior to taking a position on the Cadet staff. Increasingly complex and challenging leadership scenarios to develop ability to lead under pressure. Systematic and specific feedback on leadership abilities within the 23 leadership dimensions. 2 credits.

401 Developmental Leadership
Developing proficiency in planning, executing, and assessing complex operations, functioning as a member of a staff, and providing performance feedback to subordinates. Situational opportunities to assess risk, make ethical decisions, and lead fellow ROTC cadets. Lessons on military justice and personnel processes prepare students to transition to becoming an Army officer. 2 credits.

402 Adaptive Leadership
The dynamics of leading in the complex situations of current military operations in the Contemporary Operating Environment (COE). Examination of differences in customs and courtesies, military law, principles of war, rules of engagement and law of land warfare in the face of international terrorism. Exploring aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support. 2 credits.
Modern Languages and Literatures

Professors: W. Allen (Chair), Bartlett, Bost, Chew, Cox, Friis, Kearns, Maiden, Manyé, Patton, Pecoy, Prince, Yagi
Associate Professors: Cass, Kuoshu, Lozano-Alonso, Massei, Rasch
Assistant Professors: Bessy, Knouse, Rippon, Schmidt-Hori, Zhang
Instructor: Amengual
Lecturers: Culberson, Grant, Strickland, Tokunaga

Modern Languages and Literatures offers courses focused on languages, literatures, and cultures found throughout the modern world. The department offers majors in French, German Studies, and Spanish; it also participates in the Anthropology, Asian Studies, Chinese Studies, and Japanese Studies majors, and the English for Speakers of Other Languages, Film Studies and Latin American Studies interdisciplinary minors. Extensive offerings are also available in linguistics, while the department provides beginning courses in Hindi and Italian as well.

All new students who have previously studied French, German, or Spanish should take a placement test in that language. Placement tests are mandatory for any student who intends to continue in a language previously studied. The placement test determines the lowest level at which students may receive credit and where they will begin their study of the language at Furman. Students may opt to begin a new language.

Students who have previously studied Chinese or Japanese will meet with the appropriate language coordinator to determine placement.

Students may not enroll in a modern language course through the pass-no pass grading option until they have satisfied the general education requirement in foreign language.

French Major

A major normally consists of at least eight courses beyond FRN-201 and usually includes:

- FRN-215, 331, 332, 333, and
- at least four more courses numbered 210 or greater in French including at least one course numbered 400 or greater.

German Studies Major

A major normally consists of eight courses in German Studies beyond GRM-201 and should include:

- GRM-215 or 301,
- GRM-220 or 320, and
- at least six of the following courses:
  - GRM-305, 332, 335, 336, 337, 405, 414, 415, 430, 466.

On occasion, special topics courses are offered that also satisfy the requirements for the major.

Two of the following courses may be substituted for two of the six courses listed above: HST-206, HST-211, PSC-320, PSC-221, PHL-203, and PHL-205.

Spanish Major

A major normally consists of at least eight courses beyond SPN-201 and usually includes:

- SPN-215 and 331,
- SPN-220 or 240,
- SPN-332 or 361, and
- at least two additional literature courses numbered 300 or greater in Spanish.

All majors in the department must enroll in at least one course in their major language during both their junior and senior years. All majors are strongly encouraged to participate in a study away program before their senior year as well.

Majors wishing to be certified to teach French or Spanish must successfully complete LNG-210, either FRN-305 or SPN-305, MLL-450, a study
away experience, and EDU-111, 120, 221, 350, 460, 472, and EDEP-670 in addition to other prescribed courses in the major. The requirements for certification (teaching internship) will be completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information. MLL-350 is a further option for students wishing to teach English to non-native speakers.

Language houses in Chinese, French, German, Japanese and Spanish are located in the North Village residential complex. Amid the residential apartments, there is a common area devoted to the programmatic and informal activities of the language houses. This suite is equipped for meals and seminars, offers cable television and computers for student use, and has a direct link to the multimedia resources of the Language Center. Students can apply to live in the houses for their sophomore, junior or senior years. Students living in the houses are expected to make a one-year commitment to the program and to speak the target language in the house. To facilitate that effort, a native-speaking resident in each language lives in the house and helps to coordinate program activities. All students participating in the language house must enroll in a year-long course sequence (numbered 265 and 266) offered in conjunction with the program.

**Chinese (CHN) Courses**

**110 Elementary Chinese I**
Introduction to the sound system and grammatical structures necessary to develop listening and speaking skills in Mandarin Chinese. Initial reading and writing exercises with basic Chinese characters. An appreciation of Chinese culture underlies the orientation of the course. 4 credits.

**120 Elementary Chinese II**
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY
Prerequisite: CHN-110
Continuation of work on the sound system and grammatical structures necessary to develop listening and speaking skills in Mandarin Chinese, including reading and writing exercises with basic Chinese characters. An appreciation of Chinese culture underlies the orientation of the course. 4 credits.

**201 Intermediate Chinese I**
GER: FL (Foreign Language)
Prerequisite: CHN-120
Continuation of development of proficiency in listening and speaking, while expanding reading and writing skills, using materials of a literary or cultural nature. Includes a review of grammar. 4 credits.

**202 Intermediate Chinese II**
GER: FL (Foreign Language)
Prerequisite: CHN-201
Continuation of intermediate sequence with emphasis on communication skills, expansion of vocabulary and idiomatic expression. Cultural activities and outside readings required. 4 credits.

**220 Survey of Chinese Culture**
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
Survey of aspects of Chinese culture including: Confucianism, Taoism, Souls and Ghosts, Buddhism, the Monkey King legend, Chinese modernity, and Communist totalitarianism. Topics are covered through the study of a broad array of cultural, philosophical, historical, literary and theatrical texts. 4 credits.

**225 Chinese Film**
GER: VP (Visual and Performing Arts) and WC (World Cultures)
Cultural, intellectual, artistic and social issues that lead to an informed understanding of Chinese film, film analysis, and China. Selected films are organized under the topics of gender, ethnicity, melodrama, and urbanism. 4 credits.

**230 Survey of Chinese Literature**
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
The development of literature in China from its beginnings to the modern period. Through study of representative works in English translation, the course offers an overview of Chinese literature and examines the role of culture and society. 4 credits.

**235 Classic Chinese Fiction**
The classic Chinese novel and short story in English translation. Important works of all major dynasties from ancient times through the nineteenth century and their impact on the role of culture and society in Chinese literature. 4 credits.
245 Twentieth Century Chinese Literature
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
The development of modern Chinese literature in all genres. Through the study of the most representative works in English translation this course considers the relationship between literature and society in twentieth century China. 4 credits.

246 Twentieth Century Chinese Popular Fiction
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
General introduction to twentieth century Chinese popular fiction (popular romance, martial arts fiction, detective fiction, etc.) and to the critical theories that have informed the study of popular fiction. Investigation of how writers of modern Chinese popular fiction rewrite the themes of traditional domestic fiction and Western literary works into a discourse on transforming the “modern” into storytelling. Attention will be paid to detailed readings of selected works that have occupied a conspicuous place in discussions of Chinese popular fiction in the twentieth century. The texts will be discussed in terms of characterization, structure, genre, and the cultural/historical context. Receptions of the text past and present will also be explored. 4 credits.

265 Chinese Language House
Prerequisite: at least one Chinese course numbered 200 or greater and residential assignment to language house
Media such as newspapers, magazines, film, and television helps focus regular discussions on current topics of concern to Chinese society. Student journals are presented in both oral and written form. Chinese is used for all discussions and written work. 2 credits.

266 Chinese Language House
GER: WC (World Cultures)
Prerequisite: at least one Chinese course numbered 200 or greater and residential assignment to language house
Media such as newspapers, magazines, film, and television helps focus regular discussions on current topics of concern to Chinese society. Student journals are presented in both oral and written form. Chinese is used for all discussions and written work. 2 credits.

301 Intermediate Chinese III
Prerequisite: CHN-202
A continuation of intermediate Chinese sequence emphasizing oral skills and idiomatic usage. Students will be required to speak extensively in class. Supplementary materials will be added to the text. 4 credits.

302 Intermediate Chinese IV
Prerequisite: CHN-301
A continuation of intermediate Chinese sequence emphasizing reading of formal Chinese, writing and oral communication skills. Additional materials will be used to further develop the students’ ability to read, discuss, understand and write Chinese. 4 credits.

320 Travel Study in Chinese Culture
Study of the Chinese people, society, culture and civilization. 4 credits.

401 Advanced Chinese I
Prerequisite: CHN-302
Continued study emphasizing advanced conversation skills. Special focus on effective exchange of more complex ideas in daily life and topics of interest. 4 credits.

402 Advanced Chinese II
Prerequisite: CHN-401
Continued emphasis on advanced skills of conversation and discussion in Chinese. Special focuses include effective exchange of evolved ideas concerning various cultural topics of interest. 4 credits.

470 Chinese Studies Thesis
Prerequisite: instructor permission
Guided research, translation, and writing on a topic in a field of Chinese Studies in which the student has had previous course work. The student will propose a thesis project to a faculty member in the field of Chinese Studies who by approving it becomes the thesis advisor. 4 credits.

504 Directed Independent Study
Variable credit.

French (FRN) Courses

110 Elementary French I
Prerequisite: appropriate placement
Introduction to the sound system and grammatical structure necessary to develop listening, speaking, reading, and writing skills in French. An appreciation of French-speaking culture underlies the orientation of the course. 4 credits.

115 Intensive Elementary French
Prerequisite: appropriate placement
Designed to prepare students with some background in French for the first intermediate level course. 4 credits.

120 Elementary French II
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY
Prerequisite: FRN-110
Continuation of the skills (speaking, listening, reading, writing) developed in first elementary course, with increased emphasis on vocabulary expansion, idiomatic expression, and cultural differences. 4 credits.

201 Intermediate French I
GER: FL (Foreign Language)
Prerequisite: FRN-115 or 120
Continuation of the development of proficiency in listening and speaking, while expanding the reading and writing skills using materials of a literary or cultural nature. 4 credits.
210 Introductory to Readings  
*GER: FL (Foreign Language)*  
Prerequisite: FRN-201  
Builds upon and further enhances the basic skills developed through the first intermediate course. By reading numerous short works of fiction and nonfiction and through discussions and short written assignments in French, students enhance their critical listening, speaking, reading, writing skills while expanding vocabulary and cultural skills necessary for further study. 4 credits.

215 Composition and Conversation  
*GER: FL (Foreign Language)*  
Prerequisite: FRN-201  
Emphasis on idiomatic expression through guided oral and written practice. Review of basic phonology, grammar and syntax included. 4 credits.

220 French Civilization  
Prerequisite: FRN-201  
Survey of the culture and civilization of France and, to a lesser extent, other parts of the French-speaking world. Areas of study include history, geography, politics, the arts, and daily life. 4 credits.

221 Contemporary French Culture  
Prerequisite: FRN-201  
Overview of contemporary France through a thematic approach to such topics as geography, demography, lifestyles and cultural patterns. Examination of the influence of France and Francophone nations within the global community. 4 credits.

265 French Language House  
Prerequisite: at least one French course numbered 200 or greater and residential assignment to language house. Media such as newspapers, magazines, film, and television help focus regular discussions on current topics of concern to French society. Student journals are presented in both oral and written form. French is used for all discussions and written work. 2 credits.

301 Travel Study in French Language  
Prerequisite: FRN-210  
Part of the study away curriculum in France. Emphasis on idiomatic expression in speech and writing. 4 credits.

305 Advanced French Oral and Written Expression  
Prerequisite: FRN-215 or 301 and one other French course numbered 300 or greater.  
Advanced study to perfect spoken and written French. Emphasis is on sustained expository, persuasive and rhetorical communication; on advanced grammar usage and syntax; and on precision in the production of phonological and intonational patterns of modern French. 4 credits.

310 Travel Study in Twentieth Century French Drama  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: take 2 French courses numbered 201 or greater.  
Part of the study away curriculum in France. Survey of twentieth century French drama, both as literature and spectacle, including selected works of Montherlant, Claudel, Anouilh, Giraudoux, Sartre, and Camus. 4 credits.

320 Travel Study in French Civilization  
Part of the study away curriculum in France. Cultural history of France, including history, politics, geography, the arts, architecture, and daily life. On-site visits (museums, monuments, cathedrals, etc.). 4 credits.

321 Contemporary Senegal  
Prerequisite: FRN-201  
An interdisciplinary introduction to the culture of Senegal. 2 credits.

322 Francophone Culture in Senegal  
Prerequisite: FRN-321  
Lectures, literary readings, and visits to areas of cultural interest to familiarize participants with contemporary Senegalese cultural life. Research on a cultural topic will culminate in a written project. May Experience ONLY. 2 credits.

325 French Architecture in Context  
*GER: VP (Visual & Performing Arts)*  
Part of the study away curriculum in France. An understanding of French architectural monuments as the expression of the esthetic, religious, political and cultural values of the era that shaped them. Paris and Versailles are a particular focus. Taught in French with the assistance of on-site guides and art historians. 4 credits.

331 French Literature and Civilization I: Middle Ages and Renaissance  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: A course in French numbered 210 or greater. An interdisciplinary introduction to French civilization, literature and fine arts from their beginnings to 1600. 4 credits.

332 French Literature and Civilization II: Classicism and Enlightenment  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: a course in French numbered 210 or greater. An interdisciplinary introduction to French civilization, literature and fine arts from 1600 to 1800. 4 credits.
333 French and Francophone Literature and Civilization III: Nineteenth and Twentieth Centuries
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: a course in French numbered 210 or greater.
An interdisciplinary introduction to French civilization, literature and fine arts of the 19th and 20th centuries, including authors of the Francophone world. 4 credits.

405 Introduction to French Linguistics
GER: HB (Empirical Study of Human Behavior)
Prerequisite: two French courses numbered 210 or greater
A descriptive analysis of the French language from the smallest linguistic units to the largest units -- from sounds, words, and sentences to discourse. Topics include: the historical development of the French language, standard vs. non-standard French, language variation and sociological factors affecting language use. 4 credits.

410 French Literature in the Age of Louis XIV
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: FRN-331, 332, or 333
Study of selected works of the principal literary figures of the seventeenth century in France. Emphasis on classical drama; also includes short prose works and poetry. 4 credits.

411 French Literature of the Enlightenment
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: FRN-331, 332, or 333
Introduction to the literature of the eighteenth century (1715-89), including essay, theater and prose fiction. Works by authors such as Voltaire, Diderot, Rousseau, Montesquieu, Beaumarchais and Laclos. 4 credits.

415 French Romanticism
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: FRN-331, 332, or 333
Selected works of the principal literary figures of the first half of the nineteenth century in France. Poetry, prose fiction, and drama included. 4 credits.

417 French Realism and Naturalism
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: FRN-331, 332, or 333
Study of selected works of the principal literary figures of the second half of the nineteenth century in France. Poetry, prose fiction, and drama included. 4 credits.

420 Twentieth Century French Novel
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: FRN-331, 332, or 333
Study of the major works and authors of twentieth century prose fiction in France. 4 credits.

421 Twentieth Century French Drama and Poetry
Prerequisite: FRN-331, 332, or 333
Survey of the major developments, both theoretical and practical, in French drama and poetry since 1913. Readings include plays by such representative dramatists as Giraudoux, Sartre, Camus, Ionesco and Beckett. Among poets considered are Valéry, Apollinaire, Ponge, and the Surrealists. 4 credits.

430 Studies in French and Francophone Literature
Prerequisite: FRN-331, 332, or 333
In-depth focus on a period, movement, author, genre, or theme. Possible topics might include the French lyric tradition, exoticism, narratives of childhood, etc. May be repeated for credit based on change of topic. 4 credits.

435 Literatures in French: Writing Across Worlds
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
Prerequisite: FRN-331, 332, or 333
An upper level literature course exploring the literacy productions (20th and 21st centuries) in French of non-French authors with a special focus on the literary representation of the experiences of migration and exile. This course is taught in French. 4 credits.

445 African Novel in French
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
Prerequisite: FRN-331, 332, or 333
The major African authors writing in French. Attention given to the early relevance of negritude, colonial and postcolonial issues, the emergence of African women writers in French, and contemporary perspectives in recent works. Emphasis on the literary representation of tradition, society and culture in the francophone African fiction. 4 credits.

450 History of France
GER: HA (Historical Analysis of Human Interactions)
Prerequisite: FRN-331, FRN-332, or FRN-333
This course will offer a chronological survey of the history of France from approximately 1000 to the present. Topics will include but not be limited to history, geography, politics and the arts. 4 credits.

465 French Cinema
Prerequisite: FRN-331, FRN-332, or FRN-333
A survey of French and Francophone cinema from the 1920s era of silent film to the present day. Students will explore the historical context of each era, and become familiar with the principle film genres, directors and actors. 4 credits.
470 Senior Seminar in French
Prerequisite: two French courses numbered 300 or greater
The opportunity to address a topic, period, author, or genre in depth. The student is provided a chance to synthesize the experience of previous course work in a research project. 4 credits.

504 Directed Independent Study
Variable credit.

German (GRM) Courses

110 Elementary German I
Prerequisite: appropriate placement
Introduction to the sound system and grammatical structure necessary to develop listening, speaking, reading, and writing skills in German. An appreciation of German-speaking culture underlies the orientation of the course. 4 credits.

115 Intensive Elementary German
Prerequisite: appropriate placement
Designed to prepare students with some background in German for the first intermediate level course. 4 credits.

120 Elementary German II
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY
Prerequisite: GRM-110
Continuation of the skills (speaking, listening, reading, writing) developed in first elementary course with increased emphasis on vocabulary expansion, idiomatic expression, and cultural differences. 4 credits.

201 Intermediate German I
GER: FL (Foreign Language)
Prerequisite: GRM-115 or 120
Continuation of the development of proficiency in listening and speaking, while expanding the reading and writing skills using materials of a literary or cultural nature. 4 credits.

210 Introduction to Readings
GER: FL (Foreign Language)
Prerequisite: GRM-201
Builds upon the basic skills developed through the first intermediate course. By reading numerous short works of fiction and nonfiction and through discussions and short written assignments in Spanish, students enhance their critical listening, speaking, reading, writing skills while expanding vocabulary and cultural skills necessary for further study. 4 credits.

215 Composition and Conversation
GER: FL (Foreign Language)
Prerequisite: at least one German course numbered 200 or greater
Emphasis on idiomatic expression through guided oral and written practice. Review of basic phonology, grammar and syntax included. 4 credits.

220 German Civilization
Prerequisite: at least one German course numbered 200 or greater
Advanced intermediate level introduction to the culture and civilization of the major German speaking areas of Europe. The goal is an understanding and appreciation of the contemporary civilization and its historical development. 4 credits.

222 Contemporary Germany
Prerequisite: GRM-115 or 120
Advanced intermediate travel study language course focusing on the culture and civilization of Germany with emphasis on the large public urban setting of Berlin and on the more private small-town setting of Cuxhaven. Guided interactions with the local community will enable the students to improve and practice their German language skills. May Experience ONLY. 2 credits.

230 Specialized Readings in German
Prerequisite: at least one German course numbered 200 or greater
Introduction to the technical language of various fields in the natural sciences, social sciences, or the humanities. Offerings have included biology, business, chemistry, philosophy, and psychology. 4 credits.

265 German Language House
Prerequisite: at least one German course numbered 200 or greater and residential assignment to language house.
Media such as newspapers, magazines, film, and television help focus regular discussions on current topics of concern to German society. Student journals are presented in both oral and written form. German is used for all discussions and written work. 2 credits.

266 German Language House
Prerequisite: at least one German course numbered 200 or greater and residential assignment to language house.
Media such as newspapers, magazines, film, and television help focus regular discussions on current topics of concern to German society. Student journals are presented in both oral and written form. German is used for all discussions and written work. 2 credits.

301 Travel Study in German Language
Prerequisite: at least one German course numbered 200 or greater
Part of the study away curriculum in Germany. German study based on level of proficiency with native instructors. 4 credits.

305 Advanced German Oral and Written Expression
Prerequisite: GRM-215 and one German course numbered 300 or greater
Advanced study to perfect spoken and written German. Emphasis is on expository, persuasive and rhetorical
communication; on advanced grammar usage and syntax; and on precision in the production of phonological and intonational patterns of modern German.  4 credits.

310 Theatre and Film in Berlin
GER: VP (Visual and Performing Arts)
Prerequisite: at least one German course numbered 200 or greater
Part of the study away curriculum in Germany. Exploration of the institutions and instantiations of theater and film in the cultural crucible of Berlin. Taught in German by the accompanying Furman faculty and assisted by on-site guides in studios, theaters, and museums.  4 credits.

320 Travel Study in German Culture
Prerequisite: at least one German course numbered 200 or greater
Part of the study away curriculum in Germany. Understanding and appreciation of various art and architecture forms. Special emphasis on the German speaking world. 4 credits.

331 German Literature until 1750
Prerequisite: two German courses numbered 201 or greater
Survey of the development of Germanic literature from its earliest examples up to the Enlightenment. Primary emphasis on German literature with the reading of numerous representative texts.  4 credits.

332 German Literature from 1750 to the Present
Prerequisite: two German courses numbered 201 or greater
Survey providing initial exposure to the development of German literature from the Enlightenment to the present. Students read representative texts by major authors of the various literary periods and movements. 4 credits.

333 Modernity and Crisis: German Culture 1900-1945
GER: TA (Critical, Analytical Interpretation of Texts)
Introduces students to major issues in German culture during the period up to and including World War I, the Weimar Republic, and the Nazi era. These issues are explored through a variety of media: literature, art, film, print media, architecture of the city, among others. Students apply methods of cultural studies to explore issues through essays and oral presentations. Conducted in German. 4 credits.

334 From Rubble to Reunification: 1945-1990
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: two German courses numbered 201 or greater
Introduction of major issues in German culture since 1945, including the Stunde Null, the economic miracle, the generation 468, RAF, the East German experience, reunification and beyond. Issues explored through a variety of media, including literature, film, art/photography, pop music.  4 credits.

335 German Poetry
Prerequisite: two German courses numbered 201 or greater
Poetry by authors from all periods and movements of German literature. The goal is a basic understanding of the development of German poetry and a sensitivity to and appreciation of the poem as a vehicle for artistic expression. 4 credits.

336 German Fairy Tale
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: two German courses numbered 201 or greater
Origins of the German fairy tale, its contributions to German nationalism from Herder to the Grimm brothers and its evolution into modern, more subversive forms of the fairy tale. 4 credits.

337 German Theater
Prerequisite: two German courses numbered 201 or greater
Introduction to the major dramatists of the eighteenth, nineteenth and twentieth centuries and to drama as a literary form and a sociological, philosophical, and cultural reflection of the times. In addition to reading representative texts, the evolution of dramatic theory and techniques is examined. 4 credits.

338 History of German Cinema
GER: VP (Visual and Performing Arts)
Prerequisite: two German courses numbered 201 or greater
A study of the diverse history of German film from 1919 to the present: German Expressionism, Nazi Cinema, rubble films, New German Cinema, East German Cinema and post-wall productions. 4 credits.

405 Introduction to German Linguistics
GER: HB (Empirical Study of Human Behavior)
Prerequisite: two German courses numbered 210 or greater
Introduction to the concept of German as a modern, evolving human language. German as a synchronic phenomenon with emphases on phonology, morphology, syntax, and sociolinguistic and regional varieties as well as a diachronic phenomenon utilizing a chronological and cultural survey of the development of German from its earliest forms. 4 credits.

414 Age of Goethe
Prerequisite: two German courses numbered 201 or greater
Introduction to the literature and culture of the classical period in German literary history from 1750 to 1832. Appreciation for the development of great classical writers during an in-depth study of the major works produced in this period. 4 credits.

415 German Romanticism
Prerequisite: two German courses numbered 201 or greater
Detailed study of the principal literary figures and works of literature during the early nineteenth century in
Germany. Focus on the origins of various characteristics of Romanticism and the ramifications of this movement in other fields and in later periods of German literature.

4 credits.

430 Readings in German Literature
Prerequisite: two German courses numbered 201 or greater
In-depth focus on a period, movement, author, or genre.
Offerings in the past have been post-1945 German literature and the literature and culture of the Weimar Republic. May be repeated for credit based on change of topic. 4 credits.

466 Nazi Cinema and Culture
Prerequisite: two German courses numbered 300 or greater
Exploration of the history and the aesthetics of fascist cinema focused on Nazi Germany. During the years between the Nazis’ rise to power in 1933 and the end of World War II in 1945, cinema was part and parcel of the fascist state, leading some critics to speculate whether the “Third Reich” was perhaps “movie-made.” Analysis of productions, such as Leni Riefenstahl’s Triumph of the Will and Veit Harlan’s Jud Suss, their functions, pre-histories and their afterlives. 4 credits.

470 Senior Seminar in German
Prerequisite: two German courses numbered 300 or greater
The opportunity to address a topic, period, author, or genre in depth. The student is provided a chance to synthesize the experience of previous course work in a research project. 4 credits.

504 Directed Independent Study
Variable credit.

Hindi (HND) Course

101 Beginning Hindi
Introduction to the script, phonetic and grammatical structure necessary to develop listening, speaking, reading and writing skills in the Hindi language. 4 credits.

Italian (ITL) Course

101 Beginning Italian
Introduction to the sound system and grammatical structure necessary to develop listening, speaking, reading, and writing skills in Italian. An appreciation of Italian culture underlies the orientation of the course. 4 credits.

Japanese (JPN) Courses

110 Elementary Japanese I
Introduction to the sound system and grammatical structures necessary to develop listening and speaking skills in Japanese. Initial reading and writing exercises with some of the basic Japanese characters. An appreciation of Japanese culture underlies the orientation of the course. 4 credits.

120 Elementary Japanese II
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY
Prerequisite: JPN-110
Continuation of work on the sound system and grammatical structures necessary to develop listening and speaking skills in Japanese, including initial reading and writing exercises with some of the basic Japanese characters. An appreciation of Japanese culture underlies the orientation of this course. 4 credits.

201 Intermediate Japanese I
GER: FL (Foreign Language)
Prerequisite: JPN-120
Continuation of development of proficiency in listening and speaking, while expanding reading and writing skills, using materials of a literary or cultural nature. Review of grammar included. 4 credits.

202 Intermediate Japanese II
GER: FL (Foreign Language)
Prerequisite: JPN-201
A continuation of the intermediate sequence with emphasis on communication skills, expansion of vocabulary and idiomatic expression. Cultural activities and outside readings required. 4 credits.

225 Japanese Cinema
GER: VP (Visual and Performing Arts) and WC (World Cultures)
Survey of Japanese cinema from its beginning in 1897 to the present day. Topics include film history, the main film genres including movie sub-genres and ethnographic and other documentaries, directors, Japanese film theories and criticisms. All readings and lectures are in English and all films will be subtitled in English. 4 credits.

235 Classical Japanese Literature
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
The development of classical Japanese literature from the seventh century to 1858, when Japan opened its doors to the West. Reading representative texts in English translation in various genres from various periods. 4 credits.

245 Modern Japanese Literature
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
The development of modern Japanese literature from 1858, when Japan opened its doors to the west, to the present. Students read representative texts in English translation by major writers in various genres. 4 credits.

265 Japanese Language House
Prerequisite: at least one Japanese course numbered 200 or greater and residential assignment to language house Using primarily media such as newspapers, magazines (accessible through the Internet), film, and TV, students living in the
language houses meet regularly to discuss current topics of concern to the societies under study. Requirements include keeping a journal and presenting a project at the conclusion of the course in oral and written form. The target language is used for all discussions and written work. 2 credits.

266 Japanese Language House
GER: WC (World Cultures)
Prerequisite: at least one Japanese course numbered 200 or greater and residential assignment to language house Using primarily media such as newspapers, magazines (accessible through the Internet), film, and TV, students living in the language houses meet regularly to discuss current topics of concern to the societies under study. Requirements include keeping a journal and presenting a project at the conclusion of the course in oral and written form. The target language is used for all discussions and written work. 2 credits.

301 Intermediate Japanese III
Prerequisite: JPN-202
A continuation of the intermediate sequence emphasizing oral skills and idiomatic usage. Students are required to speak extensively in class. Supplementary materials will be added to the text. 4 credits.

302 Intermediate Japanese IV
Prerequisite: JPN-301
A continuation of the intermediate sequence emphasizing reading of formal Japanese, writing and oral communication skills. Additional materials will be used to further develop the ability to read, discuss, understand, and write Japanese. 4 credits.

401 Advanced Japanese I
Prerequisite: JPN-302
Advanced course in Japanese language study emphasizing reading of advanced materials, substantially complex writing and advanced oral skills. 4 credits.

402 Advanced Japanese II
Prerequisite: JPN-401
A continuation of the advanced sequence emphasizing reading of academic articles and books, writing of short academic papers, listening to advanced materials, and persuasive and rhetorical speech and discussion. 4 credits.

470 Japanese Studies Thesis
Prerequisite: instructor permission
Guided research, translation, and writing on a topic in a field of Japanese Studies in which the student has had previous course work. The student will propose a thesis project to a faculty member in the field of Japanese Studies who by approving it becomes the thesis advisor. 4 credits.

504 Directed Independent Study
Prerequisite: two Japanese courses numbered 201 or greater. Variable credit.

Linguistics (LNG) Courses

210 General Linguistics
GER: HB (Empirical Study of Human Behavior)
Introduction to the nature, structure, and functions of human language. Topics include: design features of language; phonology, morphology, and syntax; semantics; and language variability. 4 credits.

220 Linguistic Analysis
GER: HB (Empirical Study of Human Behavior)
Prerequisite: LNG-210
Builds upon the principles presented in General Linguistics and applies them in the analysis of further topics such as writing systems, language comparison and change, language acquisition and learning, and artificial and non-human communication systems. 4 credits.

230 Language as Social Phenomenon
Prerequisite: LNG-210 or ENG-362
An introduction to sociolinguistics, the study of the relationship between language and society. Readings, lectures and discussions will focus on variation at all levels of language and how this variation helps to create and is created by a multitude of factors with possible educational, political and social repercussions. 4 credits.

240 The Origin of Language
Prerequisite: LNG-210
Spoken language has been called the most important achievement of humanity. The origin of language may be found in the gestures of hominids millions of years ago. An investigation of how these simple gestures may have developed into the modern spoken, written, and signed languages of today. 4 credits.

250 Second Language Learning and Acquisition
Prerequisite: LNG-210
In-depth investigation of the linguistic processes and considerations involved in second and subsequent language learning and acquisition in both the classroom environment and in a natural setting. 4 credits.

405 Introduction to Romance Linguistics
GER: HB (Empirical Study of Human Behavior)
Prerequisite: at least two courses numbered 210 or greater in French or Spanish
An introduction to descriptive, historical, and applied linguistics with reference to the romance languages, specifically French and Spanish. 4 credits.

504 Directed Independent Study
Variable credit.
Modern Languages and Literatures (MLL) Courses

050  Community Based Learning
Community-based service or teaching project linking the classroom to the community in a process of experiential learning. 0 credits.

120  Reading Literature in Translation
GER: TA (Critical, Analytical Interpretation of Texts)
Reading and analyzing literature in translation. Introduction to such concepts as point of view, plot, character, imagery, symbolism, rhyme scheme and dialogue, and to various interpretive approaches. Written assignments provide practice in clarifying the understanding of literature. Topics are published prior to each term. 4 credits.

223  Slow Food, Italian Style
On-campus study of contemporary food production and consumption, as well as principles and practices of the Slow Food movement, followed by stay on an organic farm in Italy, to observe and participate in traditional food production and preparation. May Experience ONLY. 2 credits.

235  French Cinema
GER: VP (Visual and Performing Arts)
Prerequisite: any first year writing seminar
Survey of French and Francophone cinema from the 1920s to the present day. Topics will include the historical context of each era, the principal film genres, directors, actors, film theory and criticism. All readings and lectures will be in English; all films will be subtitled. Students may not receive credit for both FRN-465 and MLL-235. 4 credits.

236  Nazi Cinema and Culture
GER: VP (Visual and Performing Arts)
Prerequisite: any first year writing seminar
Exploration of the history and the aesthetics of fascist cinema. During the years between the Nazis’ rise to power in 1933 and the end of World War II in 1945, cinema was part and parcel of the fascist state, leading some critics to speculate whether the “Third Reich” was perhaps “movie-made.” All readings and lectures will be in English; all films will be subtitled. Students may not receive credit for both GRM-466 and MLL-236. 4 credits.

245  African Literature
GER: TA (Critical, Analytical Interpretation of Texts) and WC (World Cultures)
The development of African Literature from the early 1900s to the present. Focus on the representation of society, culture and peoples of African ancestry, the tumultuous changes resulting from colonial and neocolonial influences, the question of language vis-à-vis African creative writing, and the emergence of national and transnational identities. Authors include: Achebe, Mariama Ba, Emecheta, Bessie Head, Ngugi, Oyono, Sembene, and newly established writers. 4 credits.

350  Teaching English to Speakers of Other Languages: Methods
Prerequisite: ENG-362, FRN-405, GRM-405, LNG-210, LNG-405 or SPN-405
Development of linguistic, cultural, and pedagogical competence in teaching English as a second or foreign language. 4 credits.

450  Teaching Foreign Languages K-12: Methods
Prerequisite: EDU-111, 120, 221 and admission to the Teacher Education Program.
Introduction to a variety of language learning theories, with opportunities to develop materials and practice techniques appropriate to teaching foreign languages on any level. Field observations required. Emphasis on the teaching of the four skills, testing, culture, technology, and the development of foreign language proficiency. 3 credits.

501  Independent Study
Variable credit.

Spanish (SPN) Courses

110  Elementary Spanish I
Introduction to the sound system and grammatical structure necessary to develop listening, speaking, reading, and writing skills in Spanish. An appreciation of Spanish-speaking culture underlies the orientation of the course. 4 credits.

115  Intensive Elementary Spanish
Prerequisite: appropriate placement
Designed to prepare students with some background in Spanish for the first intermediate level course. 4 credits.

120  Elementary Spanish II
GER: FL (Foreign Language) for students seeking the Bachelor of Science degree ONLY
Prerequisite: SPN-110
Continuation of the skills (speaking, listening, reading, writing) developed in first elementary course, with increased emphasis on vocabulary expansion, idiomatic expression, and cultural differences. 4 credits.

201  Intermediate Spanish I
GER: FL (Foreign Language)
Prerequisite: SPN-115 or 120
Continuation of the development of proficiency in listening and speaking, while expanding the reading and writing skills. 4 credits.

210  Introduction to Readings
GER: FL (Foreign Language)
Prerequisite: SPN-201
Builds upon the basic skills developed through the first intermediate course. By reading numerous short works of fiction and nonfiction and through discussions and short written assignments in Spanish, students enhance their
critical listening, speaking, reading, writing skills while expanding vocabulary and cultural skills necessary for further study. 4 credits.

215 Composition and Conversation
GER: FL (Foreign Language)
Prerequisite: SPN-201
Emphasis on idiomatic expression through guided oral and written practice. Review of basic phonology, grammar and syntax included. 4 credits.

220 Spanish Civilization
Prerequisite: SPN-201
Survey of the culture and civilization of Spain. Areas of study include history, geography, politics, the arts, daily life, traditions, and cultural values. 4 credits.

240 Latin American Civilization
GER: WC (World Cultures)
Prerequisite: SPN-201
Introduction to Latin America through its Iberian, indigenous, and African heritage; its social institutions; its religious and social customs, festivals, and folklore; its languages and other systems of communication; its literature and arts; and its diversions and cuisine. 4 credits.

265 Spanish Language House
Prerequisite: at least one Spanish course numbered 200 or greater and residential assignment to language house. Media such as newspapers, magazines, film, and television help focus regular discussions on current topics of concern to Hispanic society. Student journals are presented in both oral and written form. Spanish is used for all discussions and written work. 2 credits.

266 Spanish Language House
Prerequisite: at least one Spanish course numbered 200 or greater and residential assignment to language house. Media such as newspapers, magazines, film, and television help focus regular discussions on current topics of concern to Hispanic society. Student journals are presented in both oral and written form. Spanish is used for all discussions and written work. 2 credits.

301 Travel Study in Spanish Language
Prerequisite: SPN-201
Part of the study away curriculum. Emphasis on idiomatic expression in speech and writing with review of fundamentals of Spanish grammar. May be repeated for credit based on change in travel destinations. 4 credits.

305 Advanced Spanish Oral and Written Expression
Prerequisite: SPN-215 or 301 and one other Spanish course numbered 300 or greater
This course is designed for advanced students to refine their spoken and written Spanish. Emphasis is on sustained expository, persuasive and rhetorical communication; on advanced grammar usage and syntax; and on precision in the production of phonological and intonational patterns of modern Spanish. 4 credits.

306 Translation Theory and Practice
Prerequisite: SPN-215 or 301 and one other Spanish course numbered 300 or greater
Spanish/English and English/Spanish translation using a variety of texts in both languages. Emphasis on advanced Spanish grammar, stylistics, and points of contrast between English and Spanish. Different approaches to translation and their impact on meaning and comprehensibility will be studied. 4 credits.

310 Travel Study in Spanish Literature
GER: TA (Critical, Analytical Interpretation of Texts)
Part of the study away curriculum. Overview of contemporary peninsular literature, with concentration on the drama. Readings and discussion of modern plays, with viewing of selected works in Madrid theaters. 4 credits.

320 Travel Study in Spanish Civilization
GER: VP (Visual and Performing Arts)
Part of the study away curriculum. Cultural history of Spain, with emphasis on Spanish art and architecture. Visits to museums and historic sites in Madrid and throughout Spain. 4 credits.

331 Survey of Spanish Literature I
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: two Spanish courses numbered 210 or greater
Introduction to representative authors and works from Spanish Medieval, Renaissance, and Baroque literature. 4 credits.

332 Survey of Spanish Literature II
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: two Spanish courses numbered 210 or greater
Survey of the major movements, principal authors, and representative works in Spanish literature since 1700. 4 credits.

335 Cuéntame: Spain, TV, and National Memory
Using the popular Spanish TV series “Cuéntame cómo pasó” (Tell Me How It Happened) as a vehicle, this course examines fundamental cultural aspects of the latter years of the Franco dictatorship and Spain’s transition to democracy (1968-1982) as portrayed through the fictional yet representative Alcántara family. The course will enrich student understanding of the dramatic social changes which accompanied the political transition, as well as current debate about the importance of historical memory in Spain. May Experience ONLY. 2 credits.
340 Travel Study in Spanish-American Literature  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Part of the study away curriculum. Overview of contemporary Spanish-American literature, focusing on the poetry, narrative, and drama of the country. Readings and discussions of representative texts complemented by viewing selected works in the theatre. 4 credits.

350 Travel Study in Contemporary Spanish-American Culture  
*GER: WC (World Cultures)*  
Prerequisite: two Spanish courses numbered 210 or greater  
Part of the study away curriculum. Through lectures, literary readings, and visits to areas of cultural interest, students familiarize themselves with contemporary Spanish-American life, as well as with the contributions of indigenous cultures to contemporary Spanish-American society. Research on a cultural topic will culminate in a written project. 4 credits.

351 Hispanic Cuisine and Culture  
Exploration of different aspects of food production and consumption as they relate to Spanish and Spanish American cultures. Through readings, discussions, small field trips to local markets and restaurants and the act of shopping for and preparing authentic Spanish and Spanish American dishes we will explore the complex web of connections between crops, ecology, farming life, politics and what have come to be called fast or slow food cultures. Conducted entirely in Spanish, a culinary study trip to Guatemala is typically required. May Experience ONLY. 2 credits.

361 Survey of Spanish-American Literature  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: two Spanish courses numbered 210 or greater  
Introduction to the major authors and representative works of Spanish America, with concentration on the age of Modernism to the present. 4 credits.

405 Introduction to Spanish Linguistics  
*GER: HB (Empirical Study of Human Behavior)*  
Prerequisite: two Spanish courses numbered 210 or greater  
A systematic linguistic study of Spanish phonology, morphology, and syntax. Also considers the historical development of Spanish from its earliest stages to the present as well as the language’s regional, social, and contextual variations, and its presence in the United States. 4 credits.

411 Golden Age Spanish Drama  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
Readings and discussion of Spanish dramatic works of the sixteenth and seventeenth centuries, including selections by Lope de Vega, Tirso de Molina, Ruiz de Alarcón, and Calderón. 4 credits.

412 Cervantes  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
Emphasis on Don Quixote with additional readings from Cervantes’s Novelas ejemplares and Entremeses. 4 credits.

417 Nineteenth Century Spanish Realism and the Generation of 1898  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
Readings and discussion of major works of Spanish peninsular literature from the age of Realism (c. 1850) through the Generation of 1898, including works by Galdós, Unamuno, Benavente, Valle-Inclán, and Pío Baroja. 4 credits.

420 Spanish Literature of the Twentieth Century  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
Survey of predominant literary movements, writers, and works (essay, short story, novel, drama, and poetry) of twentieth century. Spain from the period following the Generation of 1898 to the present. 4 credits.

430 Readings in Spanish Literature  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
In-depth focus on a period, movement, author, or genre. Possible topics include: Spanish Picaresque Literature, Literature after the Spanish Civil War, Twentieth Century Spanish Drama, etc. May be repeated once with change of topic. 4 credits.

440 Spanish-American Narrative  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
The development of the Spanish-American narrative from the period of Discovery and Conquest to the present, with emphasis on contemporary writing. Indigenous works such as the Mayan Popol Vuh are also considered. Examination of historiography, the essay, novels, and short stories. 4 credits.

445 Latin American Women’s Literature  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
Survey of literature by Latin American women from Colonial times to the present, including all major genres. Study of the evolution of women’s thought from the private realm of convent and home to the public arena of politics, women’s rights and the environmental movement. 4 credits.

448 Spanish-American Short Story  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: SPN-331, 332, or 361  
In-depth consideration of the development of the short story in Spanish America, with a primary focus on the definitive works of the Twentieth Century by authors such as Borges,
Cortázar, García Márquez, and Valenzuela. Includes a brief overview of short fiction in colonial and nineteenth-century Spanish America. 4 credits.

460 Readings in Spanish-American Literature
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: SPN-331, 332, or 361
In-depth focus on a period, movement, author, or genre. Possible topics might include Contemporary Spanish American Poetry, Gabriel García Márquez, Dissidence in Spanish American Literature, etc. May be repeated for credit based on change of topic. 4 credits.

465 Film Studies
Prerequisite: SPN-331, 332, or 361
A historical, critical, and theoretical survey of the cinema of Spain and/or Latin America. Films studied through formal properties of representation—mise-en-scène, cinematography, editing, sound—as well as through context, theme, and application. Includes examination of the relationship to other national and regional cinemas. 4 credits.

470 Senior Seminar in Spanish
GER: TA (Critical, Analytical Interpretation of Texts)
Prerequisite: SPN-331, 332, or 361
The opportunity to address a topic, period, author, or genre in depth. The student is provided a chance to synthesize the experience of previous coursework in a research project. 4 credits.

503 Individualized Internship
Prerequisite: instructor permission
Individualized internships are typically developed by seniors and juniors and approved by a faculty member in the Spanish section. General objectives for the internship experience are to provide exceptional Spanish students with an opportunity to use Spanish language skills in a professional setting and to offer students additional preparation and training for future endeavors. In addition, students, together with their on-site supervisor and faculty sponsor, will develop a list of objectives for the specific internship, maintain a log and reflective journal, meet weekly with the faculty member in person or virtually, submit an academic paper at the conclusion of the internship related to their internship work, and summarize their activities orally in Spanish for their faculty supervisor or for a larger audience as a scholarly presentation. Fifty hours of on-site activities per credit up to four credits. Cannot be completed through the pass-no pass grading option. Only four credits of either SPN 503 or SPN 505 may be applied toward the Spanish major. Variable credit.

504 Directed Independent Study
Variable credit.

505 Structured Internship
Prerequisite: instructor permission
Internships at sites approved by a faculty member in the Spanish section to provide students with an opportunity to use Spanish language skills in a professional setting and offer additional preparation and training for postgraduate work or study. Students, primarily seniors and juniors, together with their on-site supervisor and faculty sponsor, will develop a list of specific objectives for the internship, work approximately 200 hours each at their site, attend a weekly seminar to discuss their work and related literature, maintain a log and reflective journal, submit an academic paper at the conclusion of the internship related to their internship work, and summarize their activities orally in Spanish for their seminar. This course may be taken only once and cannot be completed through the pass-no pass grading option. Only four credits of either SPN 503 or SPN 505 may be applied toward the Spanish major. 4 credits.
Music

Professors: Beckford, M. Britt (Chair), Chesbro, Floyd, Hicken, Kilstoife, Koppelman, T. Joiner, Malvern, Morgan, Parsons, B. Schoonmaker, Thomas, Tompkins
Visiting Professors: Preucil, Shen, Tchivzhel
Associate Professors: Gross, C. Hutton, Matthews, Olson
Assistant Professors: Carmenates, Kennedy, Knox
Lecturers: Barksdale, Bocook, Cochran, Hamilton, A. Joiner, B. Moseley, J. Moseley, Neville, G. Schoonmaker, Tipton, Walter, Watson

The Bachelor of Music degree is offered with a major in church music, composition, music education, music theory, and performance. Students may also pursue a Bachelor of Arts degree with a major in music. All students must perform an audition and complete a music theory placement examination prior to consideration for admission to curricula leading to either the Bachelor of Music or the Bachelor of Arts degree. Formal major declaration occurs in the spring semester of the sophomore year.

Furman University is a member of the National Association of Schools of Music. Requirements for entrance to the major, for curricular standards of all degree programs, and for graduation are in accordance with the published regulations of that body. All students with a desire to initiate performance study, whether as a major or elective, are required to audition.

All music majors include:

- MUS-111, 112, 120, 211, 212, 220, 221, 320, 321, 352,
- two credits of performance topics,
- seven semesters of MUS-050 (required attendance at a specified number of approved concerts and recitals),
- one semester of MUS-051, and
- membership each semester (in residence) in at least one of the following major ensembles: MUS-060 Symphony Orchestra, MUS-061 Furman Band, MUS-062 Furman Singers, MUS-063, Furman Men’s Chorale, MUS-064 Furman Women’s Chorale or MUS-076 Guitar Ensemble

Candidates for the B.A. degree will also complete:

- PHL-330, IDS-230, or four credits in any combination from ART or THA
- two credits of music electives,
- at least eight credits of performance studies in the same instrument or voice.

Candidates for the B.M. degree enroll in additional courses consistent with their major.

A church music major must include:

- MUS-312, 340, 341, 354, 431, 423, 440, and 450,
- at least two credits of music electives from courses numbered between 300 and 499 (organ principals must complete MUS-567 Service Playing), and
- at least 16 credits of performance studies in any instrument or voice, including a minimum of 12 credits on the principal instrument and no less than four credits on the secondary instrument (voice principals will study piano or organ; all other principals will study voice).

A theory major must include:

- MUS-310, 311, 312, 313 or 410, 411, and 412,
- at least 16 credits of performance studies, including at least one course each in strings, brass, percussion and woodwinds,
- four credits of music electives numbered between 300 and 499, and
- at least four more credits in other music electives.
A composition major must include:

- MUS-310, 311, 312, 314, 411 and 412,
- MUS-313 or 410,
- at least 12 credits of performance studies, including at least one course each in strings, brass, percussion and woodwinds,
- at least six credits in composition or independent study, which must include acoustic and electro-acoustic music, and
- four credits of music electives.

Music education majors planning for teacher certification must complete:

- EDU-111, 120, 221, and 505,
- MUS-312, 353 or 354, 431, and
- at least one course in a natural science discipline (BIO, CHM, EES, PHY, or SCI) with a laboratory experience.

A student with a band or orchestra emphasis must also complete:

- MUS-330, 331, 332, 333, 432, and
- at least 14 credits of performance studies consistent with the chosen emphasis with all credits on the same instrument or voice.

A student with an elementary music or choral music emphasis must also complete:

- MUS-423, 433, 434, 450, and
- at least 14 credits of performance studies consistent with the chosen emphasis (vocal majors with at least 14 credits of voice and piano majors with at least 6 credits of voice).

Students completing the course requirements for the degree in Bachelor of Music with a major in music education will be prepared for South Carolina teacher certification in PK-12 instrumental music or PK-12 choral music based upon the course track within the degree program.

All performance majors must include:

- a half recital in the junior year,
- a full recital in the senior year, and
- additional courses according to their performance field as outlined below.

All students performing recitals must receive approval from the faculty approximately one month before the recital date.

An organ performance major must include:

- MUS-422, 451, 452,
- six credits of music electives numbered between 300 and 499,
- at least 24 credits of organ performance studies,
- two credits of harpsichord, and
- seven semesters of collaborative coaching.

A piano performance major must include:

- MUS-421, 451, 564, 568,
- six credits of music electives numbered between 300 and 499,
- at least 24 credits of piano performance studies, and
- seven semesters of chamber coaching.

Junior and senior organ or piano performance majors may accompany in lieu of participating in a large ensemble. Students must accompany for two senior recitals or three junior recitals during the same term. Permission for exercising this option must be obtained in advance and in writing from the department chair.

Except for the semester when they are teaching interns, music education majors must enroll in performance study courses every semester.

Each music education major will also present a thirty-minute recital in the designated performance studies area during their junior or senior year.
A strings performance major must include:

- MUS-420,
- two credits of methods,
- 10 credits of music electives including at least eight credits in courses numbered between 300 and 499,
- two semesters of chamber music, and
- at least 24 credits of performance studies in the major field.

A vocal performance major must include:

- MUS-355, 356, 420, 450, 456,
- at least 24 credits of voice performance studies,
- eight credits of music electives including at least six credits in courses numbered between 300 and 499.

A wind or percussion performance major must include:

- MUS-312, 420, 505,
- at least 23 credits of performance studies in the major field,
- two credits of methods,
- eight credits of music electives including at least six credits in courses numbered between 300 and 499.

Music (MUS) Courses

050 Recital Attendance
0 credits.

051 Freshman Music Colloquium
0 credits.

060 Symphony Orchestra
0 credits.

061 Furman Bands
0 credits.

062 Furman Singers
0 credits.

063 Men’s Chorale
0 credits.

064 Women’s Chorale
0 credits.

065 Chamber Choir
0 credits.

066 Oratorio Chorus
0 credits.

067 Jazz Ensemble
0 credits.

068 Jazz Combo
0 credits.

069 Brass Ensemble
0 credits.

070 Woodwind Ensemble
0 credits.

071 Percussion Ensemble
0 credits.

072 String Ensemble
0 credits.

073 String Quartet
0 credits.

074 Saxophone Quartet
0 credits.

076 Guitar Ensemble
0 credits.

101 Introduction to Music
GER: VP (Visual and Performing Arts)
Introduction to the fundamentals of music, exploring a variety of musical genres, and developing an appreciation of the diverse musical genres. Although the focus for each section varies, all sections address certain fundamentals of music: listening skills, cultural context, historical development, musical vocabulary, musical structure, and style. Requires out-of-class listening and attendance at live concerts. 4 credits.

102 Introduction to Jazz
GER: VP (Visual and Performing Arts)
Historical overview of the development of jazz. Intended for non-music majors. Includes the study of significant artists and their recordings in a social and historical context. 4 credits.

104 Voice Class I
Basic fundamentals of correct singing (posture, breathing, tone production). Beginning studies in vocal repertoire. 2 credits.
105 Voice Class II
Continuation development of principles and techniques studied in first voice class. Designed for students with prior singing experience. 2 credits.

106 Piano Class I
Basic piano for students with little or no keyboard knowledge. Early study is devoted to keyboard orientation and functional keyboard skills. Later, the study of the styles and literature of the piano is pursued through standard repertoire. 2 credits.

107 Piano Class II
For students with some previous keyboard training. Knowledge of basic rudiments of music is assumed. Emphasis is placed on developing pianistic fluency through standard repertoire and finger exercises. 2 credits.

108 Class Guitar I
Introduction to guitar skills. Intended for students with no guitar skills. Emphasis is on achievement of basic proficiency in chord playing, note reading, strumming patterns, and basic finger styles. 2 credits.

109 Class Guitar II
Continuation of MUS-108. Emphasis is on chord playing, note reading, strumming patterns and basic finger styles through learning various songs. Also designed for students with prior guitar playing experience. 2 credits.

111 Basic Musicianship I
GER: VP (Visual and Performing Arts)
Prerequisite: Department Permission
Introduction to music fundamentals, basic principles of voice leading, and harmonic progression through development of complementary skills in analysis, composition, improvisation music technology, sight-singing, ear training and at the keyboard. Comprised of three separate components, written/analytical, aural and keyboard skills. Designed for prospective majors. 4 credits.

112 Basic Musicianship II
Prerequisite: MUS-111
Ongoing study of voice leading, diatonic harmony, basic modulation, and small forms through continued development of complementary skills in analysis, composition, improvisation, music technology, sight-singing, ear training, and at the keyboard. 4 credits.

113 Composition Seminar
Prerequisite: instructor permission
Issues and topics relevant to contemporary music in general, current day compositional methods, techniques and literature in particular, and forum for presentation and discussion of works by invited guests, faculty, and students. May be repeated for credit. 1 credit.

120 Introduction to Music Literature
Prerequisite: MUS-111
Exploration of important composers and works, topics will include: recurring cycles of classicism and romanticism, performance practice, sacredness in music, the nature of creativity, translations of vocal music and the changing roles of the composer, performer and audience in society. 2 credits.

211 Basic Musicianship III
Prerequisite: MUS-112
On-going study of voice leading, chromatic harmony, advanced modulation, and small forms through continued development of complementary skills in analysis, composition, improvisation, music technology, sight-singing, ear training, and at the keyboard. 4 credits.

212 Basic Musicianship IV
Prerequisite: MUS-211
Overview of large musical forms and contemporary compositional techniques through continued development of complementary skills in analysis, composition, improvisation, music technology, sight-singing, ear training, and at the keyboard. 4 credits.

220 World Music I
GER: WC (World Cultures)
Prerequisite: MUS-211
Examination of music from selected regions of the world. Emphasis on understanding the culture, meaning, and identities found in music outside the western European paradigm. 4 credits.

221 Music History I
Prerequisite: MUS-112
The development of musical style, covering the period from Antiquity to c. 1650. Representative examples of music are discussed, with an emphasis on social-historical context and the philosophical origins of Western music. 2 credits.

310 Form and Analysis
Prerequisite: MUS-211
Prelude, reductive analysis, fugue, motivic analysis, continuous variation, binary (simple, rounded, continuous rounded, etc.), sonata (articulated binaries), theme groups, rondo, hybrid forms, concerto, concerted forms, Lieder, song forms, detailed phrase analysis, miniatures, ternary forms, associations to twentieth century music. 4 credits.

311 Composition
Prerequisite: MUS-310
Emphasis on applied study in the craft and technique of composition. Revolving topics include choral/vocal music, chamber music, consorts and mixed ensembles, large ensembles, and electronic music, complemented by analysis of representative works from classical and modern literature. May be repeated for credit. 2 credits.
312 Orchestration  
**Prerequisite: MUS-212**  
The craft of orchestration through knowledge of transpositions, ranges of instruments, actual scoring for string, woodwind, brass, and percussion sections, and finally culminating in a scoring for full orchestra. Music copying skills are developed. 2 credits.

313 Modal Counterpoint  
**Prerequisite: MUS-212**  
The ecclesiastical vocal style typical of the sixteenth and early seventeenth centuries. Emphasis on counterpoint in two, three, and four voices based on polyphonic models by Palestrina, Lassus, Victoria, and others. 4 credits.

314 Projects in Music Technology  
**Prerequisite: instructor permission**  
Focused study on a particular topic of music technology. Possible topics may include: digital audio recording/editing, advanced MIDI applications, performance with technology, multimedia production. Students develop an extended creative project and produce appropriate documentation (live presentation, audio CD, interactive DVD, etc). May be repeated for credit. 2 credits.

320 Music History II  
**GER: HA (Historical Analysis of Human Interactions)**  
**Prerequisite: MUS-212 and 221**  
Stylistic development of Western European art music within the broader context of European history. It will also explore the relationship of music history to other forms of historical inquiry. 4 credits.

321 Music History III  
**Prerequisite: MUS-212**  
A survey of the development of musical style from ca. 1890 to the present. Representative musical examples are heard, studied and discussed, with an emphasis on social-historical context. 2 credits.

325 Italian Arts and Culture  
An interdisciplinary, experiential study of select musical, artistic and architectural treasures of Italy, with emphasis on those of the Tuscan region. This course is offered as a component of the Music Department’s study away program. 2 credits.

328 Introduction to Music Research  
**Prerequisite: MUS-212**  
An introduction to the methods and standard resources of music scholarship. Emphasis will be on primary sources, research tools, and evaluation strategies. 2 credits.

330 String Methods  
**Prerequisite: MUS-212**  
Designed to produce a level of proficiency needed to teach violin, viola, cello and bass in the public schools. 2 credits.

331 Woodwind Methods  
**Prerequisite: MUS-212**  
Study of woodwind instruments for the purpose of learning teaching and playing skills. 2 credits.

332 Brass Methods  
**Prerequisite: MUS-212**  
Preparing instrumentalists to teach the fundamentals of brass performance at the elementary and secondary school level. Emphasis will be on pedagogy as well as the acquisition of performance skills on all brass instruments. 2 credits.

333 Percussion Methods  
**Prerequisite: MUS-212**  
Preparing instrumentalists to teach the fundamentals of percussion performance at the elementary and secondary school level. Emphasis will be placed upon pedagogy as well as the acquisition of performance skills on all percussion instruments. 2 credits.

334 Guitar Methods  
**Prerequisite: MUS-212**  
Designed to prepare music educators to teach the fundamentals of guitar performance at the elementary and secondary school levels. Emphasis will be placed on pedagogy and course management as well as performance skill. 2 credits.

340 Church Music Ministry  
**Prerequisite: MUS-212**  
Relationship of the music ministry to the church functions of worship, education and evangelism; the varying roles of music in the church and aspects of administering a program of church music. 2 credits.

341 Hymnology  
**Prerequisite: MUS-212**  
Survey of major developments in hymnody — both hymn texts and hymn tunes — from the early Christian era to the present. 2 credits.

350 Fundamentals of Jazz Improvisation  
**Prerequisite: instructor permission**  
Focus on the techniques and performance practice of jazz improvisation. Includes practical application of melodic, harmonic, rhythmic, and formal elements of the aural tradition of jazz. 2 credits.

351 Applied Jazz Improvisation  
**Prerequisite: MUS-350 and instructor permission**  
Individualized instruction, modeled after traditional one-on-one applied music study, with focus on more advanced applications of the melodic, harmonic, formal and textural elements of solo improvisation. May be repeated for credit. 2 credits.
352 Basic Conducting  
Prerequisite: MUS-211  
Basic skills required of a conductor: beat patterns, cuing, expressive and functional use of the left hand, introduction to score study. 2 credits.

353 Instrumental Conducting  
Prerequisite: MUS-352  
Designed to develop students’ skills and knowledge of ensemble conducting, acquaint them with a variety of musical repertoire and styles both instrumental and vocal, and develop their ability to research and prepare musical scores and administer musical ensembles. 2 credits.

354 Choral Conducting  
Prerequisite: MUS-352  
Discussion and class performance in areas of rehearsal technique, advanced conducting analysis, criteria for selecting music, and continued development of general conducting skills. Videotaping as well as written and verbal critique of conducting actions included. 2 credits.

355 Opera Performance Studies  
Prerequisite: instructor permission  
Vocal interpretation and characterization of operatic roles, moving to music, understanding theater skills and conventions, preparation and performance of opera scenes. 2 credits.

356 Lyric Diction I  
Prerequisite: MUS-511  
Review of the International Phonetic Alphabet (IPA). Application of IPA to rules of singing in Italian and German with oral and written drill. 2 credits.

410 Tonal Counterpoint  
Prerequisite: MUS-310  
In-depth study of eighteenth century contrapuntal style through analysis of works by Bach, Handel, and their contemporaries. Emphasis on composing free counterpoint in two, three, and four voices, and imitative works such as invention and fugue. 4 credits.

411 Contemporary Styles & Techniques  
Prerequisite: MUS-310  
Introduction to the analysis of musical composition and performance practice in the 20th and 21st centuries. Topics include: extended tonality, atonality, serialism, minimalism, and electro-acoustic music. 4 credits.

412 Senior Project  
Prerequisite: MUS-212 and instructor permission  
Capstone requirement of music theory and/or composition degree programs. Synthesis and culmination of undergraduate music study, especially as it relates to the area of specialty. 2 credits.

420 Literature of the Instrument  
Prerequisite: MUS-212  
Survey of the musical literature of a particular performance area. Students (typically performance majors) channel their research and study toward their own performance specialty and survey the general body of compositions written for that medium. 2 credits.

421 History & Literature of the Piano  
Prerequisite: MUS-310  
The development of the piano and a survey of the music written for it. Topics include: music written originally for harpsichord and clavichord as well as recent developments in electronic keyboard and computer technology. 4 credits.

422 History & Literature of the Organ  
Prerequisite: MUS-310  
The development of the organ and a survey of organ music. Topics include: characteristics of organs in specific countries and historical periods, and performance practices associated with specific schools and composers. 2 credits.

423 Survey of Choral Literature  
Prerequisite: MUS-212  
Choral literature, both sacred and secular, beginning with Gregorian Chant and concluding with choral-orchestral music of the 20th and 21st century will be discussed, analyzed, and heard. 2 credits.

424 Beethoven’s Ninth: Before and After  
Prerequisite: MUS-101 or 120 and the ability to read music  
Beethoven’s Ninth Symphony was recognized as a landmark work even before its first performance in 1824. In the decades following its influence was keenly felt by every composer contemplating writing a symphony. This course will use a seminar format to study Beethoven’s most influential work and its aftermath. May Experience ONLY. 2 credits.

425 Tuning Systems & the Aural Experience  
Study of the history of tuning systems which date back thousands of years. Exploring the differences between a Just Intonation tuning system and an Equally Tempered system, including the 12 Tone Equal Temperament System (12-TET). Provides students with a global perspective for experiencing music. May Experience ONLY. 2 credits.

426 Music History and Literature Topics  
Prerequisite: MUS-320  
An opportunity for intensive study of a narrow area of music history and literature, focusing on a region, genre, style, composer or other theme. May be repeated for credit with change of topic. 2 credits.

427 Opera Overload  
Prerequisite: MUS-101 or 120 and the ability to read music  
Opportunity to intensively study several complete operas. Students will prepare a variety of readings and watch video performances as a group of operas to become the
basis of seminar discussions. Students will prepare a final presentation and paper on a topic to be selected in collaboration with the instructor. May Experience ONLY. 2 credits.

428 Impressionism in France
A detailed study of Debussy and Ravel: influences by their impressionistic colleagues in the art world (Monet, Renoir, Degas, Manet) and their collaborations with poets Verlaine, Mallarme, Baudelaire, Rimbaud. May Experience ONLY. 2 credits.

430 Music for Elementary Classroom Teachers
Prerequisite: EDU-111 and 120
Designed to prepare students to teach singing and general music in elementary school. Explores methodologies of children’s music, the teaching of music reading and basic elements of music, and the use of music in the teaching of other academic content areas. 4 credits.

431 Vocal/Choral Methods
Prerequisite: MUS-212 and prior vocal training
Comprehensive study in methods of teaching vocal production in the choral setting and the private studio. Considerable emphasis on breathing, phonation, diction, intonation. In addition to the adult voice, consideration is given to the child and adolescent vocal technique. Designed to develop teaching skill. 2 credits.

432 Instrumental Music Methods
Prerequisite: EDU-221
Comprehensive study in methods of teaching instrumental music for the elementary, middle, and secondary school. Considerable emphasis on philosophy, objectives, and teaching techniques of the various instrumental ensembles. 4 credits.

433 Music Education Methods
Prerequisite: EDU-221
Designed to prepare students for K-12 teaching certification in choral and general music. Explores methodological, philosophical, managerial, instructional, and administrative factors specific to general music curricula and choral programs in middle and high schools. 4 credits.

434 Elementary Music Methods
Prerequisite: MUS-212
Required for choral/general music education majors. Explores Orff, Dalcroze, Kodály, Suzuki, and Gordon, their theories of teaching children, and/or their instructional methods and strategies. Other topics include how to teach children to sing properly, how to teach musical concepts and basic skills such as sight-reading and active listening, and how to incorporate technology into the elementary music classroom. 2 credits.

435 Jazz Performance Methods
Prerequisite: MUS-111 and instructor permission
Designed to prepare instrumental music education majors to teach jazz at the secondary school level, but open to any student with jazz experience. Focuses on jazz history, theory, improvisation, rhythm section techniques, rehearsal techniques, and jazz ensemble literature. May Experience ONLY. 2 credits.

440 Practicum in Church Music
Prerequisite: MUS-340 and 341
A semester-long field placement that will serve as a culminating experience in which the philosophies, methods and materials presented in the music core and the Church Music major curricula will be put into practice. 4 credits.

450 Vocal Pedagogy
Prerequisite: MUS-212
The science and application of vocal techniques for the teaching of singing. 2 credits.

451 Piano Pedagogy
Prerequisite: MUS-212
Designed for pianists to better understand the process of teaching piano. Learning theories, various piano methods, appropriate literature, and laboratory application, developing teaching skills for the piano. 2 credits.

452 Service Playing
Techniques and repertory of organ service playing. Topics include: hymn playing, registration, accompanying of vocal and instrumental repertory, conducting from the console, improvisation, and occasional services. 2 credits.

456 Lyric Diction II
Prerequisite: MUS-511
Review of International Phonetic Alphabet (IPA). Application of IPA to rules of singing in English, French, Latin and Spanish with oral and written drill. 2 credits.

501 Independent Study
Investigation of a topic not duplicated among the regular course offerings. 2 credits.

505 Chamber Music for Winds and Percussion
Practical knowledge of the characteristics and inherent difficulties of individual instruments through rehearsals and coaching sessions, culminating in a public performance of the selected repertoire. 1 credit.

Performance Studies
Performance Studies courses emphasize the technical and interpretive skills necessary for artistic self-expression. Students grow in their technique, artistry, and knowledge of the appropriate repertoire. Performance Studies
courses combine historical, theoretical, technical, physiological, and psychological components of music into successful performing.

All students with a desire to initiate performance study, whether as a major or elective, are required to audition.

510 Vocal Performance Topics
Enhancement of private studio study. Systematic exposure to a wide gamut of technical and artistic musical performance issues. Concurrent enrollment in appropriate performance studies instruction required. 2 credits.

511 Voice
Variable credit.

512 Opera
Variable credit.

520 String Performance Topics
Enhancement of private studio study. Systematic exposure to a wide gamut of technical and artistic musical performance issues. Concurrent enrollment in appropriate performance studies instruction required. 2 credits.

521 Violin
Variable credit.

522 Viola
Variable credit.

523 Cello
Variable credit.

524 Double Bass
Variable credit.

525 Classical Guitar
Variable credit.

526 Jazz Guitar
Variable credit.

527 Harp
Variable credit.

528 Jazz Bass
Variable credit.

530 Brass Performance Topics
Enhancement of private studio study. Systematic exposure to a wide gamut of technical and artistic musical performance issues. Concurrent enrollment in appropriate performance studies instruction required. 2 credits.

531 Trumpet
Variable credit.

532 Horn
Variable credit.

533 Trombone
Variable credit.

534 Euphonium
Variable credit.

535 Tuba
Variable credit.

540 Woodwind Performance Topics
Enhancement of private studio study. Systematic exposure to a wide gamut of technical and artistic musical performance issues. Concurrent enrollment in appropriate performance studies instruction required. 2 credits.

541 Flute
Variable credit.

542 Oboe
Variable credit.

543 Clarinet
Variable credit.

544 Bassoon
Variable credit.

545 Saxophone
Variable credit.

546 Contra-Bassoon
Variable credit.

547 Bass Clarinet
Variable credit.

548 Piccolo
Variable credit.

549 English Horn
Variable credit.

550 Percussion Performance Topics
Enhancement of private studio study. Systematic exposure to a wide gamut of technical and artistic musical performance issues. Concurrent enrollment in appropriate performance studies instruction required. 2 credits.

551 Percussion
Variable credit.

552 Drum Set
Variable credit.
560  **Keyboard Performance Topics**  
Enhancement of private studio study. Systematic exposure to a wide gamut of technical and artistic musical performance issues. Concurrent enrollment in appropriate performance studies instruction required. 2 credits.

561  **Piano**  
Variable credit.

562  **Organ**  
Variable credit.

563  **Harpischord**  
Variable credit.

564  **Advanced Collaborative Piano**  
The study and performance of chamber music literature involving the piano. Works of various style periods and instrumentations will be studied, with specific repertoire chosen to fit the particular strengths and interests of the students enrolled. 2 credits.

565  **Chamber Ensemble Piano**  
Study and performance of chamber music literature involving the piano. Repertoire to be studied will be chosen from the standard chamber music literature, subject to the approval of the instructor, and will be coached during the student's weekly lesson. 1 credit.

568  **Introduction to Organ and Harpsichord**  
Introduction to the playing techniques, means of musical expressiveness, and repertories associated with the organ and harpsichord. Includes study of basic organ registration, as well as continuo performance for both instruments. 2 credits.

569  **Jazz Piano**  
Variable credit.

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**Neuroscience Program**

Professors: Blaker (Director), Turgeon  
Associate Professors: Hollis, Rice

To graduate with a major in neuroscience, a student must have an overall grade point average of at least 2.00 in all courses required for the major.

A major in neuroscience consists of 12 courses and must include:

- BIO-222 or PSY-202,
- BIO-221 and 460,
- CHM-110, 120, and 220,
- NSC-401 and 502,
- PSY-320 and 402, and
- at least four more courses from the following list, which must include at least one course in biology and at least one in psychology.

BIO-300  **Cell Biology**
BIO-302  **Molecular Genetics**
BIO-303  **Intermediary Metabolism**
BIO-322  **Human Physiology**
BIO-420  **Chordate Morphology & Development**
BIO-422  **Human Genetics**
BIO-425  **Developmental Biology**
BIO-450  **Microanatomy**
BIO-460  **Neurobiology**
BIO-470  **Immunology**
CSC-343  **Artificial Intelligence**
IDS-200  **Brain and Mind**
IDS-310  **Pathophysiology**
PHL-320  **Philosophy of Science**
PHY-431  **Electronics**
PSY-211  **Childhood and Adolescence**
PSY-213  **Adulthood and Aging**
PSY-311  **Behavior Disorders**
PSY-321  **Psychopharmacology**
PSY-322  **Memory and Cognition**
PSY-323  **Animal Behavior**
PSY-404  **Autism**
PSY-481  **Brain Imaging**

Students will be advised by the directed in the selection of courses to ensure a balanced representation of suitable disciplines and focus in a particular area of interest. None of the courses a student uses as electives for the neuroscience
major may also count toward another major.

For course descriptions, see listing under individual departments. On occasion, special topics courses are offered that also satisfy the requirements for the major.

**Neuroscience (NSC) Courses**

*401 Current Topics in Neuroscience*
Prerequisite: instructor permission
Year-long capstone course for neuroscience majors that will provide students with knowledge of current research practice and implications. Format includes discussion of primary research findings, thesis preparation, and research presentation. 4 credits.

*450 Methods in Behavioral Neuroscience Research*
Prerequisite: PSY-320
Preparation for independent research. Topics such as ethics, conducting advanced literature searches, handling and injecting rodents, mixing drugs, how to make scientific presentations, writing for publication, and advanced statistics are covered. Students complete a literature review or research proposal and oral presentation. May Experience ONLY. 2 credits.

*502 Research in Neuroscience*
Prerequisite: instructor permission
Original and independent research. Working with the Neuroscience faculty, the student poses a question of significance in neuroscience, devises an experimental protocol, and collects data to evaluate the question. Projects may be performed either on campus or at other locations. Presentation of the research is required. Variable credit.

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**Philosophy**

Professors: Epright, Worth (Chair)
Associate Professors: E. Anderson, Gandolfo, Stone
Assistant Professors: Baba, Simmons

A major in Philosophy consists of eight to eleven courses and must include:

- PHL-101,
- at least two of the following courses: PHL-201, 202, 203, 205, and
- at least one course in non-Western philosophy: PHL-220, 230, 240, 250, 260, 270.

To graduate with a major in philosophy, a student must have an overall grade point average of 2.00 in all philosophy courses. A student should consult the department chair for individual planning of the major program.

**Philosophy (PHL) Courses**

*101 Introduction to Philosophy*

*GER: UQ (Ultimate Questions)*
Introduction to some of the classic problems of philosophy, with emphasis on understanding the nature of philosophical reflection and reasoning. Includes epistemology, ethics, metaphysics and other major branches of philosophy. 4 credits.

*105 Logic*

Formal analysis of arguments with emphasis on symbolic logic. 4 credits.

*201 Ancient Philosophy*

*GER: TA (Critical, Analytical Interpretation of Texts)*
Prerequisite: PHL-101
Consideration of the beginnings of the Western philosophical tradition focusing primarily on Plato and Aristotle. 4 credits.

*202 Modern Philosophy*

*GER: TA (Critical, Analytical Interpretation of Texts)*
Prerequisite: PHL-101
The growth and development of philosophical thought from Descartes through Kant. 4 credits.
### Nineteenth Century Philosophy
**GER: TA (Critical, Analytical Interpretation of Texts)**
**Prerequisite: PHL-101**
Important figures and themes of nineteenth century philosophy. Readings chosen from Hegel, Schelling, Schopenhauer, Feuerbach, Marx, Kierkegaard, Darwin, and Nietzsche. 4 credits.

### Twentieth Century Philosophy
**GER: TA (Critical, Analytical Interpretation of Texts)**
**Prerequisite: PHL-101**
Introduction to the important figures and themes of twentieth century philosophy. Attention given to material from both the analytic and phenomenological traditions. Postmodern responses to these traditions also examined. 4 credits.

### Realizing Bodymind: Whole Person Development
**GER: MB (Mind and Body) and WC (World Cultures)**
**Prerequisite: PHL-101**
Survey of “Wholeness Concepts” which promote lifetime fitness and healthy lifestyle habits. Topics include the philosophical and corporeal cultural traditions of South Asia, East Asia, and Northeast Asia. Introduction to the martial art of Ki-Aikido as well as additional disciplines (including meditation) that promote the experience of mind and body unification. 4 credits.

### Ki-Aikido: Five Disciplines
The five types of training that characterize the practice of Ki-Aikido. These include Aikido arts, Ki-Breathing, Ki-Meditation, Kiatsu, and Sokushin no Gyo. The course involves practice in these disciplines and critical examination of the way in which these disciplines are grounded in a philosophical worldview that emphasizes the interconnected nature of reality. May Experience ONLY. 2 credits.

### Chinese Philosophy
**GER: WC (World Cultures)**
Survey of the development of Classical Chinese Philosophy with emphasis upon Confucian, Daoist, and Neo-Confucian traditions. 4 credits.

### Confucian Philosophy
**GER: WC (World Cultures)**
**Prerequisite: PHL-101**
A comprehensive survey of Confucian philosophy including Early Confucianism (Confucius and Mencius), the Daoxue or Neo-Confucianism of the Song (960-1276) and the Ming (1368-1644) Dynasties (Zhu Xi and Wang Yangming), and the 20th Century New Confucian Movement (Mou Zongsan and Tang Junyi). 4 credits.

### Japanese Philosophy
**GER: WC (World Cultures)**
The development of Japanese Philosophy from the classical period to modern times with a focus upon Buddhist philosophy and its intersection with the West. Analysis includes Early Buddhism, Kukai’s Shingon Buddhism, and Dogen’s Soto Zen Buddhism. The encounter of Japanese Philosophy with the West is studied through modern figures such as Nishida Kitaro, Watsuji Tetsuro, and Yuasa Yasuo. 4 credits.

### Latin American Philosophy
**GER: WC (World Cultures)**
Latin American philosophical reflection from four key eras of the region’s history: Pre-Conquest; arguments for and against the Conquest; the 19th century struggle for independence; and exciting currents in 20th century thought (liberation and feminist philosophies) 4 credits.

### Africana Philosophies
**GER: WC (World Cultures)**
Philosophical themes in sub-Saharan Africa and the African Diaspora in the Caribbean and the United States. Topics include: what counts as Africana philosophy; race; colonialism; gender; and slavery. Ontological, ethical and socio-political questions considered. 4 credits.

### Ethics
**Prerequisite: PHL-101**
The nature of morality, the grounds of moral obligation, and the principles of moral decision-making according to classical and contemporary moral philosophers. 4 credits.

### Medical Ethics
**GER: UQ (Ultimate Questions)**
**Prerequisite: PHL-101 and instructor permission**
Intersection of major moral theories with health care delivery systems. Topics addressed include refusal of lifesaving treatment, autonomy and paternalism in health care, and allocation of scarce medical resources. Course requires participation in clinical rotations at several health care facilities. Course must be enrolled with IDS-301 and SOC-234. 4 credits.

### Environmental Ethics
**GER: NE (Humans and the Natural Environment)**
**Prerequisite: PHL-101**
Examination and evaluation of various approaches to moral problem solving with reference to environmental and ecological issues. Topics include: Animal Liberation, the Land Ethic, Biocentrism or Reverence for Life, Ecofeminism, Deep Ecology, and Environmental Justice. 4 credits.
304 Ethics of Globalization  
*GER: NE (Humans and the Natural Environment)*  
Prerequisite: PHL-101 or PSC-103  
Consideration of how to make an ethical assessment of globalization’s economic, environmental, political aspects. Topics include: the benefits/costs of globalization, who is benefiting and possible alternatives to globalization. 4 credits.

310 Social and Political Philosophy  
Prerequisite: PHL-101 or PSC-103  
Central issues in social and political philosophy. Topics vary, but may include: the philosophical foundations of the state, the basis and limits of individual freedom, the place of religion in a democracy, the justification of punishment, the requirements of distributive justice, and the treatment of cultural, racial, and gender diversity. Readings typically include works by both classical and contemporary philosophers. 4 credits.

311 Philosophy of Law  
Prerequisite: PHL-101 or PSC-103  
Investigation of philosophical questions relating to law. Topics include the question of what law is, the responsibility of the individual faced with unjust law, and the relation between philosophical understandings of the law and the resolution of legal issues. Readings include philosophical treatments of law and texts of legal opinions from courts. 4 credits.

312 Philosophy of Gender  
Prerequisite: PHL-101  
Examination of competing feminist theories. For example, liberal feminism, socialist or Marxist feminism, radical feminism and others. Analyzing the philosophical assumptions concerning women and women’s situations that underlie each view, and examining the philosophical traditions from which each theory is developed. 4 credits.

321 Philosophy of Psychology  
Prerequisite: PHL-101  
An examination of mental health, mental illness, and moral psychology. Course will consider the various conceptions of the self, personhood, and human nature at the root of traditional theories of psychology. Topics discussed will include: personal identity, freedom, decision-making, and autonomy. Course will consider ways in which persons are categorized as mentally healthy or ill and evaluate approaches to the treatment of mentally ill persons. 4 credits.

331 Philosophy of Food  
*GER: TA (Critical, Analytical Interpretation of Texts)*  
Prerequisite: PHL-101  
Examination of the philosophical aspects of food from historical, ethical and aesthetic perspectives. The role of food in Plato’s Republic and Aristotle’s Ethics and throughout the history of philosophy. The construction of ethical systems in regard to growing food, consuming food, animal rights, and resource management. An examination of aesthetic pleasure and disgust, as well as a consideration of “taste”. 4 credits.

340 Philosophy of Religion  
Prerequisite: PHL-101  
Investigation of the central philosophical issues relating to religious belief and practice. Topics include arguments for and against the existence of God, the problem of evil, the nature and significance of religious experience, and the relationship between the different world religions. 4 credits.

350 Epistemology  
Prerequisite: PHL-101  
Introduction of philosophical reflection about knowledge. How should knowledge be defined, why knowledge is good to have, whether there are good responses to skepticism, how we should understand the relationship between knowledge and rational justification, what is the correct understanding of how beliefs come to be rationally justified, how we should understand such notions as “truth” and “objectivity,” and whether knowledge is relative to particular conceptual schemes or cultures. 4 credits.

355 Fact, Fiction and Fraud  
Examination of the philosophical concept of truth as seen primarily through film. We will question whether or not there can be such a thing as a “true story.” Final project will include making your own movie. May Experience ONLY. 2 credits.

370 Philosophers, Movements and Problems  
Prerequisite: PHL-101  
Further investigation into a particular philosopher, movement or problem. 4 credits.

375 Metaphysics  
Prerequisite: PHL-101  
Investigation into the nature, constitution, and structure of reality. Categorization of all things and articulation of the special relations that obtain between those categories. Topics may include universals and particulars, personal identity, freedom and determinism, modality, causation, and time. Examination of central issues and problems of metaphysics through discussions and reading works by both classical and contemporary philosophers. 4 credits.
**400 Senior Seminar in Philosophy**  
Prerequisite: PHL-101  
Reading, research, and writing course for majors, normally in their senior year, covering a specific topic in philosophy. 4 credits.

**501 Independent Study**  
Prerequisite: PHL-101 and instructor permission  
Either a research project or a reading program. Students must have a 3.00 grade point average in a minimum of three philosophy courses and an overall grade point average of 2.70 to register. Variable credit.

**506 Senior Honors Thesis I**  
Prerequisite: PHL-101 and instructor permission  
An independent study course for eligible students who choose to write a senior thesis as a capstone experience. Solely devoted to researching and writing the student’s thesis. Typically completed in the senior year in tandem with PHL-507. 4 credits.

**507 Senior Honors Thesis II**  
Prerequisite: PHL-101 and instructor permission  
An independent study course for eligible students who choose to write a senior thesis as a capstone experience. Solely devoted to researching and writing the student’s thesis. Typically completed in the senior year in tandem with PHL-506. 4 credits.

**Physics**

Professors: Baker (Chair), Brantley, D’Amato, J.D. Turner  
Visiting Professor: Conrad  
Associate Professors: Moffett, Wang

Physics offers majors in physics and in pre-engineering. Students majoring in either field must have a minimum grade point average of 2.00 in all physics courses and must take a comprehensive examination in physics.

**Physics Major**

The major consists of the following courses:

- MTH-151, and 160,
- PHY-111, and 112,
- PHY-241, 311, 312, 321, 322, 331, 441, and
- at least one of the following: PHY-421, 432, 442, 451, or 452.

Students intending to pursue a B.S. degree in physics are strongly encouraged to complete PHY-111, 112, 241, and 331 along with MTH-150, 151 and 160 by the end of their sophomore year. MTH-151 and 160 serve as pre- or co-requisites to all upper-level physics courses.

Majors intending to pursue graduate study in physics should also strongly consider enrolling in additional courses, including PHY-442, 451, 452, 502 or 504, plus courses in related fields, such as CSC-121, MTH-250, and 255.

Physics majors planning to teach physics in secondary schools must also complete BIO-101, 102, or 111; CHM-110; EES-110 or 112, or PHY-105 or 451; EDU-111, 120, 221, 350, 454, 460, 472, and EDEP-670 in addition to the prescribed courses in the major (excluding PHY-441 and the final elective in physics). MTH-250 and 255 are also highly recommended. The requirements for certification (teaching internship) will be
Physics 165

completed on a post-baccalaureate, graduate credit basis, with the student becoming eligible for certification at the end of fall term following graduation. Refer to the Education section of this catalog for specific requirements for admission to the Teacher Education Program and other pertinent information.

Dual-Degree Engineering Program

The dual-degree engineering program normally consists of three years at Furman and two to three years at one of our affiliated schools: Auburn University, Clemson University, Georgia Institute of Technology, North Carolina State University, the University of South Carolina or the University of Georgia. The Furman degree is awarded with a major in either pre-engineering or physics. Degree requirements vary depending on the major pursued at Furman and the engineering school attended.

The requirements for the dual-degree major in pre-engineering:

- CHM-110 and 115,
- MTH-151, 160, 250, and 255,
- PHY-111, 112, 311, 321 and 331, and
- additional CSC, ENG, and other courses as specified by the destination engineering program

The requirements for the dual-degree major in physics:

- CHM-110 and 115,
- MTH-151, 160, 250, and 255,
- PHY-111, 112, 311, 312, 321, 322, and 331,
- at least one of the following: PHY-241, 441, 421, 432, 452, 442, or 451, and
- additional CSC, ENG, and other courses as specified by the destination engineering program.

Additional details and requirements are available from the department and can be found on the department web site: physics.furman.edu.

The bachelor’s degree at Furman is awarded after successful completion of an appropriate portion of the engineering curriculum at the other school. The engineering degree is awarded upon completion of the entire program.

A minimum grade point average of 2.60 is required to declare a major in the dual-degree program.

Physics (PHY) Courses

101 Survey of Physics for Non-Science Majors
GER: NW (Empirical Study of the Natural World)
A philosophic and conceptual examination of selected fundamental principles of physics. No prior knowledge of physics is assumed. Some historical and biographical material is included. 4 credits.

104 Energy—of Man, Creation and Calories
GER: NW (Empirical Study of the Natural World) and NE (Humans and the Natural Environment)
The concept of energy treated from the broadest possible perspective. Emphasis on the four laws of thermodynamics and the four black-hole analogs. With this foundation the various thermodynamic aspects of energy are treated as they relate to a variety of areas, including the impact of energy on environmental aspects of human life. 4 credits.

105 Descriptive Astronomy
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: high school algebra
Apparent motion of the Sun, Moon and planets; the birth of modern astronomy; properties of light and its detection; the Sun and the Solar System; the structure, properties and evolution of stars; galaxies and cosmology. 4 credits.

111 General Physics I
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: high school calculus. MTH-150 or (140 and 141) strongly recommended
The basic concepts and laws of classical mechanics. Measurement and units, vectors, kinematics, Newton’s laws of motion, work and energy, systems of particles, collisions, rotational kinematics, torque and angular momentum, rigid body statics and dynamics, simple harmonic motion, gravitation, and mechanics of solids and fluids. 4 credits.
112 General Physics II
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: PHY-111 and MTH-141 or 150. MTH-151 strongly recommended
The basic concepts and laws of classical electricity and magnetism. Electrostatic and magnetostatic forces and fields. Gauss’ law, electric circuits, Ampere’s law, Faraday’s law, electric and magnetic properties of matter, time-varying fields, Maxwell’s equations and electromagnetic waves, and geometrical optics. 4 credits.

113 General Physics III
Prerequisite: PHY-111

119 Physics of Music
Prerequisite: PHY-111
Fundamentals of simple harmonic motion and waves. Physics of strings and vibrating air columns will be studied in detail. Lab activities will include the study of wave motion and the Fourier analysis of sounds. May Experience ONLY. 2 credits.

241 Introduction to Modern Physics
Prerequisite: PHY-112
Special theory of relativity, particle nature of electromagnetic radiation, waves and wave nature of matter, the Heisenberg Uncertainty Principle, historical models of the atom, Schroedinger’s equation and its application to one-dimensional systems, quantum theory of the hydrogen atom, electron spin, many-electron atoms, and introduction to nuclear physics. Must be enrolled with MTH-160. 4 credits.

311 Classical Mechanics I
Prerequisite: PHY-112. MTH-255 is recommended. Kinematics and dynamics of particles and systems of particles, oscillations, introduction to Lagrangian and Hamiltonian dynamics, central force motion, motion in non-inertial reference frames, and dynamics of rigid bodies. 4 credits.

312 Classical Mechanics II
Prerequisite: PHY-311
An advanced treatment of topics studied in the first classical mechanics course, plus gravitation, coupled oscillations, mechanics of continuous media, the one-dimensional wave equation, and relativistic kinematics and dynamics. 4 credits.

321 Electromagnetic Theory I
Prerequisite: PHY-112. MTH-255 is recommended. Development of the Maxwell equations. Electrostatic forces and fields, potential theory, magnetostatic forces and fields, time-varying fields. 4 credits.

322 Electromagnetic Theory II
Prerequisite: PHY-321
A continuation of the first course on electromagnetic theory. Application of Maxwell’s equations to radiating systems, systems and properties of electromagnetic waves in vacuum and matter. Radiation theory and relativistic electrodynamics. 4 credits.

331 Thermodynamics and Statistical Mechanics
Prerequisite: PHY-241 is recommended
Laws of heat and thermodynamics, kinetic theory of gases, introduction to statistical mechanics. 4 credits.

421 Optics
Prerequisite: PHY-112. PHY-321 is recommended. Geometrical optics, image formation by lenses and mirrors, optical instruments and aberrations, Fresnel equations, optical properties of materials, nonlinear optics and the modulation of light, interference and diffraction, Fourier optics, laser operation and properties. Laboratory activities include numerical simulations of lens aberrations, Brewster angle experiment, electro-optic effect, magneto-optic effect and the spatial light modulation. 4 credits.

431 Electronics
Prerequisite: PHY-112
Theory and applications of active and passive circuits containing resistors, capacitors, inductors, transistors and integrated circuits. Course is laboratory-oriented. Students build and analyze circuits involving these components in various applications, including active and passive filters, transistor amplifiers, operational amplifiers, power supplies and digital circuits. 4 credits.

432 Experimental Methods in Physics
Prerequisite: PHY-241
Introduction to modern sensors, optical devices and their applications in the field of experimental science. Experiments designed to give practice in the art of making precise measurements and the processing of experimental data. Hands-on experience in instrumentation and experimentation in optics, electronics and a number of other areas in applied physics and engineering. 4 credits.
441 Introduction to Quantum Mechanics  
Prerequisite: PHY-241  
Introduction to quantum formalism, the simple harmonic oscillator, angular momentum, the hydrogen atom, spin and indistinguishable particles, and applications. Should be enrolled with MTH-255. 4 credits.

442 Quantum Mechanics  
Prerequisite: PHY-441  
Duality of matter and radiation, state functions, linear momentum, the Schroedinger equation, systems of particles, angular momentum and spin. 4 credits.

451 Introduction to Astronomy and Astrophysics  
Prerequisite: PHY-241, 311, and 321. PHY-441 is recommended.  
Survey course in introductory astronomy and astrophysics for science majors. Gravitation and orbital motion; evolution and structure of the solar system, galaxy, and universe; stellar classes, structure and evolution. Laboratory activities include numerical simulations of various cosmological and stellar models, the study of spectrographic data, and astronomical observations. 4 credits.

452 Atomic and Nuclear Physics  
Prerequisite: PHY-241  
Atomic physics topics include solutions to the Schroedinger equation for the hydrogen atom, one dimensional square well, spin orbit coupling and the periodic table. Nuclear physics topics include stable nuclei, nuclear decay, the radial square well and a model for the deuteron, as well as the simple harmonic oscillator and the nuclear shell model. An introduction to elementary particles and accelerators is also included. 4 credits.

461 Teaching Methods and Materials in Physics  
Prerequisite: department permission. 4 credits.

502 Research  
Guided experimentation or theoretical research on selected topics in physics. Working with a faculty sponsor, the student poses a question of interest for research, writes an agreement specifying work expectations, and conducts research to answer the question. A formal paper resulting from the research is required upon completion of the project that must be prepared and submitted to a journal. Variable credit.

504 Directed Independent Study  
Study of a selected topic designed to instill deeper understanding of areas of physics beyond formal course work. Working with a faculty sponsor, the student selects a focused area for further study and writes an agreement specifying work expectations. A formal paper or portfolio of sufficient length and composition to demonstrate a scholarly review with a bibliography resulting from the study is required. Variable credit.

Political Science

Professors: Aiesi, Bressler, Fraser, Gordon, Guth, Halfracre, Halva-Neubauer, Kaup, Nelsen, E. Smith, Tessitore, Vinson (Chair)  
Associate Professors: Cosby, Malici, Storey  
Assistant Professors: Fleming, Yildirim  
Lecturer: Norwood

A major in political science must include:
- PSC-101, 102, 103, 150,
- at least one advanced course in two of the four designated sub-fields: American Politics, Comparative Politics, International Relations, and Political Thought,
- one engaged learning course or four credits offered during the May Experience through the department, and
- two additional advanced courses in political science.

Students planning to major in political science should consult with the chair or a faculty advisor in the department to select specific courses suited to their individual interests and needs.

Political Science (PSC) Courses

101 Introduction to American Government  
GER: HB (Empirical Study of Human Behavior)  
The basic political science course focusing on American politics. Emphasis on the principles, institutions and politics of the federal government. Topics include: the U.S. Constitution, the presidency, Congress, the Supreme Court, political parties and interest groups, and the federal bureaucracy. 4 credits.

102 Introduction to World Politics  
GER: HB (Empirical Study of Human Behavior)  
Examination of similarities and differences between the institutions, processes and policies of selected nations, in the context of globalization and the evolution of international politics. 4 credits.

103 Introduction to Political Thought  
GER: UQ (Ultimate Questions)  
A survey of major political thinkers, directed toward considering whether the ultimate grounds of political questions are natural, divine, or human. 4 credits.
150 Introduction to Political Analysis  
GER: HB (Empirical Study of Human Behavior)  
Prerequisite: PSC-101 or 102  
The methodology of contemporary political science, including research techniques for studying political behavior. 4 credits.

American Politics

202 The American Presidency  
Prerequisite: PSC-101  
The constitutional and political evolution of the presidential office, with emphasis on relations with Congress, the federal bureaucracy and the judiciary. Focus on presidential functions such as legislative leadership, budgeting, administrative coordination and making foreign policy. 4 credits.

203 Judicial Process and the U.S. Supreme Court  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: PSC-101  
The judicial process and the federal system through the case method. 4 credits.

204 Civil Rights and the U.S. Constitution  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: PSC-101  
Study of the civil rights of the American constitution through readings and the case method. 4 credits.

205 Public Policy in the United States  
Prerequisite: PSC-101  
Study of public policy in the United States with an emphasis on influential policy actors, theories of the policymaking process, the tools of policy analysis, and important policy areas, such as education, the environment, and defense policy. 4 credits.

206 Law and Public Policy  
Prerequisite: PSC-101  
Do court rulings effect significant change in public policy? We examine this question by investigating U.S. Supreme Court holdings and public policy in the following areas: education, death penalty, abortion, land preservation, access to justice, abortion and voting rights. 4 credits.

207 State Politics  
Prerequisite: PSC-101  
Comparative analysis of politics in the American states. Emphasis on federalism (intergovernmental relations), state governmental services and functions. 4 credits.

208 Urban Politics  
Prerequisite: PSC-101  
Study of problems facing cities, including community power structures, poverty, welfare, education, housing, urban renewal and law enforcement. 4 credits.

209 Southern Politics  
Prerequisite: PSC-101  
An investigation of how the American South has developed politically and how the region has helped to shape American politics as a whole. Focus includes race, economics, and religion and how they have affected the political dynamics of the region. 4 credits.

210 Interest Groups and Political Movements  
Prerequisite: PSC-101  
Analysis of the role of interest groups and political movements in the United States, with a focus on the origins, maintenance and strategies of these organizations. 4 credits.

211 Racial and Ethnic Politics  
Prerequisite: PSC-101  
Examination of African American, Hispanic, Asian American and Native American efforts to organize for political action in the face of political, social and economic constraints. Groups are compared to other politically active groups in U.S. politics. 4 credits.

212 Women and Politics  
Prerequisite: PSC-101  
Examination of the experience and role of women in the political arena, including such topics as campaigns and elections, political leadership, social movement participation, media coverage, public policy formation and public opinion. 4 credits.

213 Environmental Policy  
GER: NE (Humans and the Natural Environment)  
An analysis of the ways and context in which environmental policies are developed, promoted, and deliberated. Issues such as waste management and environmental justice illustrate the ways that individuals, agencies, and elected officials create, implement, enforce, and evaluate such policies. Contemporary case studies in the Greenville area illustrate environmental and sustainability issues such as pollution prevention and promoting local food systems. While conservation policy focuses primarily on the regulation of land, environmental policy has a much broader scope. 4 credits.

214 Environmental Law  
GER: NE (Humans and the Natural Environment)  
Evolution of key laws and court cases governing the ways that individuals and communities interact with the natural environment. Governmental regulation of environment and human health has grown dramatically in recent years, often resulting in litigation or conflict mediation. Examples in which environmental laws have spawned significant compliance complexities, legislative lobbying, and organizational advocacy will be addressed. 4 credits.
215 Public Administration  
Prerequisite: PSC-101  
Study of public administration with emphasis on major theories of administration and democracy, the role of bureaucracy in American society and the challenges facing public administrators at the national, state and local level. 4 credits.

301 The American Congress  
Prerequisite: PSC-101 and 150  
The development and operation of the U.S. Congress, focusing on its constitutional and political bases. Topics include elections, representation, congressional parties and committees, policy making, and relations with the presidency. 4 credits.

315 Media and Politics  
Prerequisite: PSC-101 and 150  
The place of the media as an institution in the American political system. Topics include the nature of the U.S. media, their relationship to the president and the bureaucracy, Congress, the courts and interest groups, the media’s role in political campaigns and policy-making, and the media’s influence on opinion and political behavior of elites and the public. 4 credits.

317 Political Behavior  
Prerequisite: PSC-101 and 150  
Formation, organization and change of attitudes about American politics; study of political participation and its correlates. Methods of survey design and analysis including computer adaptations. 4 credits.

Comparative Politics

221 Politics of the European Union  
Prerequisite: PSC-102  
Study of the institutions, policies and processes of the European Union and the major theories of regional integration. 4 credits.

222 Politics of Russia  
GER: WC (World Cultures)  
Prerequisite: PSC-102  
Examination of the development of institutions, policies, processes and cultures in the late Soviet and post-Soviet eras. 4 credits.

223 Politics of Developing Nations  
GER: WC (World Cultures)  
Prerequisite: PSC-102  
Introduction to politics of the non-Western nations, with emphasis on the political development of the Middle East, Africa, Asia and Latin America. Presentation of a comparative framework for understanding diverse political cultures. 4 credits.

224 Politics of Africa  
Prerequisite: PSC-102  
Comparative study focusing on traditional political structures, the impact of colonialism, and contemporary political systems and parties. 4 credits.

225 Politics of the Middle East  
GER: WC (World Cultures)  
Prerequisite: PSC-102  
Focus on the interplay of religion, nationalism, colonialism and regional conflict in the context of national as well as world politics. 4 credits.

226 Politics of China  
GER: WC (World Cultures)  
Prerequisite: PSC-102  
Examination of the political, social and economic factors affecting the Chinese Communist Party and its relationship to the Chinese citizenry. Analysis of the domestic and international challenges confronting the Chinese state. 4 credits.

227 Environmental Politics in China  
GER: NE (Humans & the Natural Environment)  
Prerequisite: PSC-102  
Examination of the key environmental challenges facing China, efforts to combat environmental destruction, and prospects for China’s sustainable development. Will explore the interaction of minority and environmental concerns and the impact of tourism on both. 4 credits.

229 Politics of Asia  
GER: WC (World Cultures)  
Prerequisite: PSC-102  
Examination of one of the world’s most dynamic regions. Common issues facing disparate regimes will be explored through case studies from Communist regimes, military and transitional systems, and restricted democracies. The region’s changing international role and influence will be discussed. 4 credits.

230 Politics of Latin America  
Prerequisite: PSC-102  
Emphasis on the institutions, processes and policies through which Latin American countries attempt to accommodate the forces of tradition and of political, economic and social change. 4 credits.

235 Politics of Religious Movements  
Prerequisite: PSC-102  
Effects of religious movements on the politics of modernizing societies, comparing Europe, the United States, the Middle East and Latin America. 4 credits.

236 Political Parties  
Prerequisite: PSC-102  
Examination of political parties as they appear in established and emerging democracies. Special emphasis on U.S. political parties in comparative perspective. 4 credits.
244 Issues in Latin American Politics  
Prerequisite: PSC-102  
GER: HB (Empirical Study of Human Behavior)  
This course offers a comparative analysis focusing on the persistence of authoritarianism and the processes and challenges associated with democratic transition and consolidation in selected Latin American countries. Taken as a component of Furman’s Latin America study away program. 4 credits.

320 Politics of Europe  
Prerequisite: PSC-102 and 150  
Study of political institutions, policies and processes in European democracies. 4 credits.

International Relations

250 International Relations  
Prerequisite: PSC-102  
Examination of the sources of conflict and cooperation in the international system and their effects on the development of foreign policy. 4 credits.

251 International Peace and Security  
Prerequisite: PSC-102  
Examination of security challenges facing leaders in the twenty-first century. Topics include: WMD, wars of insurgency, terrorism, peace keeping, nation building, and ethnic conflict. 4 credits.

252 American Foreign Policy  
Prerequisite: PSC-102  
Emphasis on the nature of U.S. national interests, major foreign policy actors and institutions, and principal modes and patterns of decision-making. American foreign policy toward selected allies and adversaries is also considered. 4 credits.

254 Foreign Policy Leadership  
GER: HB (Empirical Study of Human Behavior)  
Prerequisite: PSC-102  
Examination of the personalities, beliefs, and cultural milieu of foreign policy leaders and how these leadership factors contribute to historical and contemporary peace and conflict processes in world politics. Also, considering leadership assessment techniques. 4 credits.

256 International Political Economy  
Prerequisite: PSC-102  
The relationship between politics and economics on the national and international levels, focusing on the impact of political forces on the functioning of the international economic system. 4 credits.

258 International Organization  
Prerequisite: PSC-102  
International organization is the ordering principle in the international system including institutions, regimes, law and norms. The goal of the organization is to govern the interactions among state and non-state actors. Challenges to these ordering principles and their effectiveness in specific cases will be studied. 4 credits.

Political Thought

270 Classical Political Thought  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: PSC-103 or PHL-101  
Textual analysis of selected works by classical authors such as Plato, Aristotle, Cicero, Augustine, and Aquinas. 4 credits.

272 Modern Political Thought  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: PSC-103 or PHL-101  
Textual analysis of works by authors such as Machiavelli, Hobbes, Locke, Rousseau, Burke, Marx, Mill, and Nietzsche. 4 credits.

273 American Political Thought  
GER: TA (Critical, Analytical Interpretation of Texts)  
Prerequisite: PSC-103 or PHL-101  
Analysis of the principles underlying American politics, focusing on textual analysis of the writings of our most influential statesmen, stateswomen, and public intellectuals. 4 credits.

275 Issues in Political Thought  
GER: TA (Critical, Analytical Interpretations of Texts)  
Examination of selected moral and political themes in light of the tradition of political thought, drawing from classic texts in political thought as well as the writings of contemporary scholars and public intellectuals. 4 credits.

278 Readings in Political Thought  
Prerequisite: PSC-103 or PHL-101  
Patterned on the model of a reading group, students will focus on a significant author or theme in the tradition of political philosophy. Readings will vary by year and instructor. Topics could include Aristotle’s Politics, the political theories of Leo Strauss, or Machiavelli’s Discourses on Livy. May Experience ONLY. 2 credits.

304 Jurisprudence, Law and Ethics  
This course examines a broad range of contemporary legal issues from the theoretical standpoint of ethics and jurisprudence. Theory is employed to present legal developments within their particular social and historical context. 4 credits.

Study Away

122 Democracy the Scandinavian Way  
Exploration of politics and policies in the United States and Scandinavia. The course includes briefings by experts and policy makers on location. May Experience ONLY. 2 credits.
216 South Carolina Politics and Policy
Prerequisite: PSC-101
Constitutional underpinnings, politics, institutions and policies of South Carolina’s government. Typically offered in conjunction with the State Capital Experience travel study program in Columbia, SC. 4 credits.

240 Economic and Political Analysis of the European Union
Prerequisite: PSC-102
Same as ECN-371. An examination of the formation, implementation and operation of the European Union, with special emphasis on political and economic issues. Taught as part of the Furman program in Europe. Students may not receive credit for both PSC-240 and ECN-371. 4 credits.

241 Issues in Central and East European Politics
Prerequisite: PSC-102
Examination of change in Central and Eastern Europe, with emphasis on such topics as the politics of democratization, economic transformation, international security, and environmental degradation and protection. 4 credits.

242 Issues in African Politics
Prerequisite: PSC-102
Examination of change in Africa, with emphasis on such topics as the politics of democratization, ethnicity, economic development, the environment and international relations. 4 credits.

243 Issues in Chinese Politics
Prerequisite: PSC-102
Examination of China in the post-Mao era, focusing on the pressures for reform and the central government’s ongoing struggle to maintain control while liberalizing the political and economic system. Includes interviews with government officials and citizens in Shanghai. 4 credits.

322 Welfare States in America and Scandinavia
Prerequisite: PSC-101
Advanced exploration of welfare states in the United States and Scandinavia. The course includes briefings by experts and policy makers on location. May Experience ONLY. 2 credits.

323 The European Union in Theory
Prerequisite: PSC-102
Exploration of prescriptive and explanatory approaches to the post-World War II integration of Europe. The course includes briefings by academics on location in Europe. 4 credits.

324 The European Union in Practice
Prerequisite: PSC-102
Examination of the institutions, policy-making processes and policies of the European Union. Includes visits to EU institutions and briefings by experts and policy makers on location in Brussels and other European capitals. 4 credits.

Capstone Courses

401 Capstone Seminar in Political Science
Prerequisite: PSC-101, 102, 103 and 150
Reading, research and writing course for majors that covers a specific topic in political science. 4 credits.

410 Senior Research Seminar
Prerequisite: instructor permission
Guided research and writing on a topic in any field of political science proposed by the student and approved by the instructor. 4 credits.

Engaged Learning

504 Directed Independent Study
Prerequisite: instructor and department permission. Variable credit.

505 Fieldwork in Politics
Prerequisite: PSC-101 or 102
Through internships and related assignments, students employ research methods, test previous political science research, and acquire a deeper understanding of domestic and international affairs. Variable credit.

506 Fieldwork in State and Local Public Affairs
Prerequisite: PSC-101
Through 165-hour internships in local or state governmental agencies (both political and administrative) or nongovernmental agencies (such as interest groups, media or nonprofits), students are exposed to the way in which subnational policy is formulated, implemented and evaluated. In addition, students attend a weekly seminar that integrates various themes in public administration, public policy and state and local government. 4 credits.

507 The Washington Experience
Prerequisite: PSC-101 or 102
Examination of political, civic and cultural aspects of the American political system while living in Washington, DC. Includes internship in a government agency or political organization, with appropriate academic perspectives. 4 credits summer, 8 credits spring.

508 The Brussels Experience
Prerequisite: PSC-102
Internship in a European Union institution or related organization with appropriate academic perspectives. 4 credits.

509 Fieldwork in State Legislatures
Prerequisite: PSC-101
State legislative interns compare and contrast their internship experiences with the appropriate political science literature to gain a deeper understanding of the representation process. 4 credits.
511 Mediation and Conflict Resolution
An introduction to the theory and practice of mediation, a non-adversarial method for resolving disputes. Students will practice active listening skills, facilitative responses, non-verbal communication skills, and mediation techniques (brainstorming, settling on a mutual option, and writing an effective agreement). The broader implications of conflict resolution such as restorative justice and forgiveness studies will also be explored. May Experience ONLY. 2 credits.

512 Trial Advocacy
Historical foundations of trial advocacy; analysis of the structure of a trial from opening statements to closing arguments; students practice all components of a trial (e.g., direct and cross examination) and stage several trials in local courthouses. Cases rotate between civil and criminal fact patterns. May Experience ONLY. 2 credits.

513 Conservation and Renewable Energy
Fostering and incentivizing conservation behavior and the goal of carbon neutrality and the challenges associated with pursuing those endeavors. Mechanics of renewable energy technologies and the study of encouraging environmentally sustainable behavior. The political context in which college campuses finds themselves with regard to renewable energy policy will also be examined. May Experience ONLY. 2 credits.

514 Campaigning for Office in SC
Explores the roles of candidates, consultants, activists, political parties, and the media in state-wide elections in South Carolina. Students will travel the state to speak with key figures in South Carolina politics and to attend political meetings as participant observers. May Experience ONLY. 2 credits.

515 Poverty and the Law
Through readings, discussions and field trips (to courtrooms, Legal Aid, public defenders, ICE, DSS, prisons) considering the factual and ethical aspects of the relationship between poverty and the law in the US. May Experience ONLY. 2 credits.

516 Farm
An introduction to farm policy, agricultural history, and contemporary issues in agriculture policy (nitrogen run-off, impact of global markets, biofuels). Course is taught on a working farm in north central Iowa. May Experience ONLY. 2 credits.

517 Politics and National Integration in Ireland
Examines theories of national integration, democratic accountability, political culture, and nation-building. Students will explore these ideas in the political contexts of Northern Ireland and the Republic of Ireland. May Experience ONLY. 2 credits.
Psychology (PSY) Courses

111 General Psychology
GER: HB (Empirical Study of Human Behavior)
Comprehensive introduction to psychology as a behavioral science through a survey of historical, empirical, and theoretical perspectives of psychological research. Topics may include: biological bases of behavior, development, learning, personality, cognition, perception, motivation, behavior disorders, and social psychology. Students must either participate in research projects or write summaries of published research articles. 4 credits.

201 Research Methods & Statistics I
GER: HB (Empirical Study of Human Behavior)
Prerequisite: PSY-111
Introduction to the principles of science, research design, data collection with humans and/or animals, statistical analysis, and scientific writing. Designed to acquaint students with the scientific methods used to study behavior; covers the fundamental methodological, statistical, and writing skills necessary for most advanced psychology courses. Lab work, computer analysis of data, and written reports of laboratory projects are integral to the course. 4 credits.

202 Research Methods & Statistics II
Prerequisite: PSY-201 (enrolled consecutively in the same semester)
Continuation of first research methods and statistics course. Introduction to the principles of science, research design, data collection with humans and/or animals, statistical analysis, and scientific writing. Designed to acquaint students with the scientific methods used to study behavior; covers the fundamental methodological, statistical, and writing skills necessary for most advanced psychology courses. Lab work, computer analysis of data, and written reports of laboratory projects are integral to the course. 4 credits.

211 Childhood and Adolescence
GER: HB (Empirical Study of Human Behavior)
Prerequisite: PSY-111
The psychological principles and processes of human development from conception through adolescence. Theory and empirical research related to physical, cognitive, social, and emotional development are reviewed. A student may not receive credit for both EDU-120 and PSY-211. 4 credits.

212 Social Psychology
GER: HB (Empirical Study of Human Behavior)
Prerequisite: PSY-111
Study of individual human behavior as it affects and is affected by other people. Topics include the self, attitudes, group dynamics, prejudice, interpersonal attraction, impression formation, attribution, aggression, and pro-social behavior. 4 credits.

213 Adulthood and Aging
GER: HB (Empirical Study of Human Behavior)
Prerequisite: PSY-111
Developmental changes associated with adulthood. Includes topics such as changes in memory functioning, physicality, caregiving, and socio-emotional processing. Selected topics related to atypical aging, such as Alzheimer’s disease and living to be a centenarian will also be addressed. 4 credits.

214 Health Psychology
Prerequisite: PSY-111
Issues of health and illness from a biopsychosocial perspective. Examining how the body responds to stress, the role of personality, social relationships, coping and socio-economic status in health and chronic disease. Students will conduct a term-long personal health behavior project. 4 credits.

215 Organizational Psychology
Prerequisite: PSY-212
Applied research and practices in social psychology specific to organizational behavior. Topics covered include: personnel recruitment, performance appraisal, training, leadership, motivation, conflict resolution, strategic planning, development, ethics, and diversity issues. Project involving eight hours of on-site observation and/or participation in a local organization is required. 4 credits.

216 Personality
Prerequisite: PSY-111
Study of the major theories of personality that have provided the historical groundwork and perspective for current personality research. Topics include psychoanalytic, trait, cognitive, behavioral, and humanistic theories. Students will learn about different personality theories and how they are tested empirically, become familiar with different methodologies for studying personality, and better understand what personality is and the role it plays in our lives. 4 credits.

311 Abnormal Psychology
Prerequisite: PSY-111 and one other course in psychology, BIO-222, or HSC-201
An introduction to the study of psychopathology. Topics include the definition, assessment, and classification of psychopathology; a survey of the types of disorders, their etiologies, symptoms, and treatments. 4 credits.

314 Psychometrics and Assessment
Prerequisite: PSY-202 or BIO-222
An introduction to the psychometric principles of test construction and test use and to the theories and methods of psychological assessment. 4 credits.
318 Clinical Psychology
Prerequisite: PSY-202 or BIO-222 and PSY-311
Advanced study of how clinical psychologists assess, diagnose and treat psychopathology. Topics include historical basis of clinical psychology, evidence-based assessments and treatments, ethics and multicultural competency and professional training and practice. Designed for upper-level students considering a mental health-related career. 4 credits.

320 Introduction to Biopsychology
GER: NWL (Empirical Study of the Natural World with laboratory)
Prerequisite: PSY-202 or BIO-222
Study of the biological bases of behavior. Appropriate for all majors, particularly those with potential interest in neuroscience or neuropsychology. Fundamentals of brain structure (gross and fine anatomy) and function (neurophysiology and chemical transmission). Overview of sensory systems from peripheral to central processing, including perception. Study of motor pathways and diseases of movement. Introduction to human neuropsychology, motivation, mood, memory and cognition. Lab projects focus on neuroanatomy and sensory systems. 4 credits.

321 Psychopharmacology
Prerequisite: PSY-320
An introduction to the mechanisms of drug action, effects, use and abuse. General topics include principles of pharmacology, neural substrates underlying drug addiction, and the therapeutic use of drugs for mental function. 4 credits.

322 Memory and Cognition
Prerequisite: PSY-202 or BIO-222
Examination of the research and theories of human memory and cognition. Topics include perception, attention, encoding and retrieval processes, forgetting, the nature of long-term memory, and decision-making. Experimental approaches to studying these topics will be discussed. Lab projects focus on experimental and statistical methods for studying and analyzing cognitive processes. 4 credits.

323 Animal Behavior
Prerequisite: PSY-202 or BIO-222
Comparative analyses of behavior among a variety of nonhuman species. Evolutionary theory is emphasized in the study of social behavior, aggression, reproductive and parental behavior, territoriality, predator-prey relationships, and other topics. Lab projects with birds, insects, mammals, fish, and reptiles emphasize the development of adaptive behaviors. 4 credits.

324 Learning
Prerequisite: PSY-202 or BIO-222
Introduction to the empirical facts and theories of animal and human learning. Historical perspective provided for the development of experimental approaches to learning. Topics include classical and instrumental conditioning, reinforcement, learning related to emotion and motivation, generalization, and discrimination. More recent cognitive emphases also considered. A research report is an important aspect of the course. 4 credits.

329 History and Systems of Psychology
Prerequisite: PSY-202 or BIO-222 and at least four other courses in psychology
Historical perspective on contemporary psychology. Various approaches to defining and studying psychology are analyzed in a seminar format. 4 credits.

402 Behavioral Neuroscience
Prerequisite: PSY-320
Advanced study of the relationship between the brain and behavior, including fundamental principles of neurobiology, neuroanatomy and neurochemistry/pharmacology, and application to complex problems in the field of behavioral neuroscience. Seminar discussion of current research in neuroscience, including genetics, mood disorders, drug abuse and cognition. Group and independent laboratory research required. 4 credits.

403 Perspectives on Self and Identity
Prerequisite: PSY-212 and PSY-202 or BIO-222
Advanced study of current and classic research on the self, particularly the processes involved in maintaining positive self-views. Topics may include the biases inherent in attributions, memories, and self-assessments, and the possible drawbacks associated with such biases. Read and discuss primary literature. 4 credits.

404 Autism
Prerequisite: PSY-211 and PSY-202 or BIO-222
Historical and contemporary theory and scientific research related to autism are examined. Areas of focus include biological and environmental underpinnings of the disorder, aspects of cognition and social development that are affected, and current interventions. An important part of the course is discussion with area experts who specialize in autism. 4 credits.

413 Current Topics in Aging: Research and Practice
Prerequisite: PSY-202 and PSY-213
This seminar requires students to read and discuss primary literature on current issues in the study of Adulthood and Aging. Topics may include memory, everyday problem solving, communication, caregiving, social networks and lifestyle. Group and independent research involving on-site observations and working directly with seniors will be required. 4 credits.

450 Advanced Research Techniques
Prerequisite: PSY-202
An introduction to and preparation for independent research in a specific sub-field of psychology. Topics include specialized research methodologies, advanced statistics, oral
and written communication of research findings, and ethics. A literature review, research proposal and oral presentation. May Experience ONLY. 2 credits.

503 Individualized Internship
Prerequisite: PSY-202 or BIO-222, at least one other course in psychology and instructor permission
Provides majors with experience in professional psychology. Interns complete a minimum of 25 hours per credit of on-site activities related to internship objectives, complete a comprehensive paper, participate in scheduled seminar meetings, and have individual meetings with their faculty and on-site supervisors. Cannot contribute to major requirements. Pass-no pass only. Variable credit.

505 Structured Internship
Prerequisite: PSY-202 or BIO-222, at least one other course in psychology and instructor permission
Provides majors with experience in mental-health fields. Students develop objectives for the internship experience, read relevant literature, complete a comprehensive paper, submit weekly reflective summaries of their internship activities, participate in biweekly seminar meetings, and present on their internship experience. Interns complete a minimum of 35 hours of site work per academic credit. Pass-no pass only. Variable credit.

509 Supervised Research
Prerequisite: PSY-202 or BIO-222 and instructor permission
Participation in all or several phases of the research process, including literature review, research design, creation of materials and stimuli, data collection, data entry, and data analysis and interpretation. Must produce a written or oral summary of the research project. Does not contribute to major requirements. Variable credit.

510 Thesis
Prerequisite: PSY-202 or BIO-222 and instructor permission
Conduct original research under the supervision of a three-person committee (chaired by the supervising faculty member). A proposal, research paper and an oral presentation are required. May contribute only once to major requirements. 4 credits.

Religion
Professors: S. Britt (Chair), Rutledge, Siegel, H.L. Turner
Associate Professors: Bibb, Crowe-Tipton, L.I. Knight, Sneed, Stulting, Teipen
Assistant Professors: Fink, Nix, Wardle
Lecturer: Yazijian

A religion major includes at least eight courses and must include:

- two courses numbered 200 or greater from a single religious tradition,
- two more courses numbered 200 or greater from another religious tradition or one course from another religious tradition and a comparative course or two comparative courses,
- at least three more courses in Religion,
- REL-475, and
- attendance at the department colloquium each spring

Traditions

Jewish and Christian Studies
Bible: REL-210, 211, 214, 310, 311, 314, 315, 316, 317, 318 and 319
Theology & Ethics: REL-240, 241, 242, 244, 246, 250, 260, 342, 343 and 344
History: REL-220, 226, 232, 236, 237, 312, 331, 348, 350 and 360

Buddhism
REL-224 and 327

Islam
REL-222, 322 and 323

Hinduism
AST-220, 225, REL-223 and 325
Comparative

ANT-344, REL-221, 225, 227, 228, 230, 341 and 401

REL-101, 110, 111, 125 or a first year seminar on a religious topic may contribute to major requirements subject to approval from the department, while two two-credit May Experience courses taught by members of the Religion department may be considered as a single course for meeting major requirements. The specific courses included for completion of the major are agreed upon in consultation with the department chair.

Religion (REL) Courses

101 Dimensions of Religion
GER: UQ (Ultimate Questions)
Exploration of the phenomenon of religion as manifested in the variety of religious experiences and expressions, including symbols, myths, rituals, and religious literature. Sacred writings from a variety of religious traditions will be considered. 4 credits.

110 Bible in the Public Square
GER: UQ (Ultimate Questions)
The basic biblical literacy necessary for engaging issues in the public sphere in which the Bible exerts a defining social and cultural influence. Assumes no previous knowledge of biblical literature, and is aimed at students across a wide spectrum of religious affiliation and interest. Topics will vary but may include: teaching the Bible in the public schools; the Bible and evolution; apocalyptic discourse; the Bible in the gay marriage debate; the Bible and the construction of the Other; Biblical scholars in the public sphere. 4 credits.

111 Bible and Ultimate Meaning
GER: UQ (Ultimate Questions)
A study of selected biblical texts with an focus on ultimate questions raised and addressed by those texts. Typically, biblical texts are studied in pairs or triads, emphasizing diverse perspectives, and in relation to other literature, ancient and modern. 4 credits.

125 Religions of the World
GER: WC (World Cultures)
Important ideas and practices of major religions in historical and cultural context. 4 credits.

210 History, Literature, and Religion of the Old Testament
GER: TA (critical, analytical interpretation of texts)
The Old Testament in its historical context, with emphasis on the forms and contents of its literature and the religion of ancient Israel. 4 credits.

211 New Testament and Early Christianity
GER: TA (critical, analytical interpretation of texts)

214 Apocalypse
An examination of the apocalyptic genre, including its literary, cultural, and historical features as well as its theological motifs. Focus on apocalyptic texts in the Hebrew Bible, the Christian Scriptures, and non-canonical documents. The appropriation of apocalyptic themes throughout history in artistic forms such as art, fiction, and film, with particular attention to how apocalyptic thinking continues to shape 21st century ways of being in the world. 4 credits.

216 The Digital Bible
GER: TA (critical, analytical interpretation of texts)
An introduction to the philosophy and method of biblical translation and interpretation, particularly drawing upon digital resources such as online texts, ebooks, and biblical software. An academic interpretation of the Bible, using electronic tools to explore the original Hebrew and Greek and to evaluate English translations of the Bible and theological arguments based on them. 4 credits.

218 Modern Battles over the Bible
Exploration of controversial issues related to English biblical translation in the twentieth century. Topics will include the history of the English Bible, different approaches to modern biblical translation, and several key “cruxes” of translation, i.e., controversial biblical passages that have been at the center of passionate religious debate and infighting. May Experience ONLY. 2 credits.

220 Introduction to Judaism
GER: UQ (Ultimate Questions)
Examination of the development, beliefs and practices of Judaism. Historical and sociological issues related to Judaism’s interaction with other cultures, and especially with Christianity, are considered. 4 credits.

221 Native American Religions
GER: UQ (Ultimate Questions) and WC (World Cultures)
Considering both the diversity and common themes in Native American religion through the study of selected
tribal groups. Central are the ways in which these traditions contribute to our understanding of myth, ritual, the creation of religious worldviews, and even our definition of religion. 4 credits.

222 Introduction to Islam
GER: UQ (Ultimate Questions) and WC (World Cultures)
An examination of the origins and development of Islam, the world's second largest religious tradition. Particular attention is given to the formation of Islamic faith and practice as well as contemporary manifestations of Islam in Asia, Africa, and North America. 4 credits.

223 Hindu Cultures and Religious Worlds
GER: UQ (Ultimate Questions) and WC (World Cultures)
Exploration of Hindu beliefs and practices with an emphasis on major religious themes that link classical traditions with popular piety. 4 credits.

224 Introduction to Buddhism
GER: UQ (Ultimate Questions) and WC (World Cultures)
Examining the doctrines, practices, and communal life of the Buddhist religious tradition. Beginning with the origins of Buddhism in India, its spread and transformation through Asia and to the West. Exploring the various interpretations about Buddhology, the meaning of Dharma and how it becomes embodied in practice. Studying the Buddhist perspectives and approaches to issues and challenges Buddhist face in the modern world. 4 credits.

225 Religions in Africa
GER: UQ (Ultimate Questions) and WC (World Cultures)
Introduction to major religious cultures of Africa. It explores three major types: African Traditional Religions (ATR), African Islam, and African Christianity. Focus on the variety of beliefs concerning Divinity, creation, the human person, and society. Relationship of these ideas to symbolic, ritual, and communal dimension of African life. Special attention to the role of Christianity as a catalyst of change, the emergence of the African Independent Churches (AIC), and new African theologies. 4 credits.

226 EasternOrthodoxy and Roman Catholicism
GER: UQ (Ultimate Questions)
The development, beliefs, institutions, and public and private practices of Eastern Orthodox Christianity and Roman Catholicism. Relationship of these traditions to each other and to Protestantism also examined. 4 credits.

227 Religions of South Asia
GER: WC (World Cultures)
Introduction to contemporary religions of South Asia by examining the religions that have developed in the Indian subcontinent—Hinduism, Jainism, Buddhism, and Sikhism—as well as the influences of religions born elsewhere—Islam, Christianity, and others. 4 credits.

228 History of God
GER: UQ (Ultimate Questions)
Survey of scriptures and theologies of Judaism, Christianity, and Islam in historical perspective. Emphasis on the historical backgrounds in which the three Abrahamic religions arose, the development of sacred scriptures, and the theological struggles of late antiquity and early medieval times shaping orthodox as well as heterodox segments of these three religions. 4 credits.

229 Carolina Dharma: Ritual Spaces among Hindus and Jains
The contextualization of Hindu, Jain, and Buddhist traditions in upstate South Carolina. Historical and cultural background of the region, especially examining the impact of Evangelical Christianity on its norms and values. Development of Hindu, Jain, and Buddhist communities over the last forty years and the role that ritual practice and the construction of sacred spaces (Hindu Temples, Buddhist viharas) has played in the adaptive process. May Experience ONLY. 2 credits.

230 Religion in America
GER: HA (Historical Analysis of Human Interactions)
Historical survey of belief systems and practices of the religions and civil religion of Americans and the relationship of these to American culture. Emphasis on principal denominations and movements within and growing out of Judaism and Christianity. Native American religions, the American form of selected other religions, new religious movements studied briefly. 4 credits.

232 African American Religion
GER: HA (Historical Analysis of Human Interactions)
Surveying a number of prominent figures, themes, issues, and developments in African American religion in the United States. Examining a variety of figures and how their thought shaped and continues to shape African American religious expression. 4 credits.

236 History of Western European Christianity until 1300
GER: HA (Historical Analysis of Human Interactions)
The History of Christianity from Late Antiquity through the High Middle Ages. Emphasis on the interplay of religious and cultural change with special attention to institutional developments and to popular devotional practices. 4 credits.

237 History of Western European Christianity from 1300-1650
GER: HA (Historical Analysis of Human Interactions)
A survey of the History of Christianity from the late Middle Ages through the Early Modern Period. 4 credits.
240 Basic Christian Theology
GER: UQ (Ultimate Questions)
Introduction to what the Christian community as a whole has believed, taught, and confessed on the basis of Scripture and theological reflection. Examining the nature of theology, and its traditional expressions in such topics as the Trinitarian understanding of God, human sinfulness, reconciliation, and servant hood, and God’s relation to the world in creation, providence, and eschaton. 4 credits.

241 Christian Classics
GER: UQ (Ultimate Questions)
Interpretation of texts expressing the devotional tradition of Christian faith, with emphasis on their time, place, and ecclesiastical tradition, as well as the perennial human issues they raise. Texts include works by Augustine, Francis of Assisi, Julian of Norwich, Martin Luther, John Woolman, Soren Kierkegaard, Dietrich Bonhoeffer and others. 4 credits.

242 Modern Christian Thought
GER: UQ (Ultimate Questions)
Introduction to Christian thought in the western tradition with a focus on the European Enlightenment critiques and counter-critiques, the Romantic movement, and the rise of modern historical consciousness. Emphasis will be on liberal Protestantism; however, Catholic modernism will also be discussed. 4 credits.

243 Debating God: New Atheists and Old Defenders
In recent years, a number of provocative books have appeared attacking the idea of God, and the religious traditions that teach belief in God. While some of these critiques represent traditional suspicion of religion from the natural (Richard Dawkins) and social (Sam Harris) sciences, there are also new aspects to these criticisms that are important to note (Christopher Hitchens, Daniel Dennett). This course will examine a representative sample of these thinkers, their backgrounds, and representative responses from religious thinkers. May Experience ONLY. 2 credits.

244 Topics in Twentieth Century Theology
Significant western theological movements, figures, and problems in the 20th century, especially from 1900-1965. Figures include Barth, Niebuhr, Tillich, and Rahner. Students are expected to articulate each thinker’s approach in relation to other thinkers, and to traditional and novel problems. Another objective is to situate foundational theological writings and the lives of the thinkers in their social, ecclesial, and cultural contexts. 4 credits.

246 Body and Soul in Christian Thought
GER: UQ (Ultimate Questions)
Exploration of Christian debates over human nature and the quest for God, drawing on sources from the first through seventeenth centuries. Among our questions will be: What are human beings? How are human beings reconciled to God? What is the relationship between human and divine in Jesus Christ? 4 credits.

250 The Nature of Ministry
Examination of the biblical and historical background of ministry, areas of contemporary ministry, and personal and social motivation for ministry. 4 credits.

260 Religion and Literature
GER: TA (Critical, Analytical Interpretations of Text)
Readings of novels, poems, plays, chiefly modern, with emphasis on human transformation, the relationship between narrative structure and religious meaning, and the sacramental imagination. Texts have included works by Tolstoy, Hesse, Sartre, F. O’Connor, W. Percy, Dinesen, Robbe-Grillet, Kundera, and works on narrative theology and literary criticism. 4 credits.

261 Brothers Karamazov
Intensive study of Fyodor Dostoyevsky’s novel, The Brothers Karamazov. The possibility of faith, Christianity as an organized religion, the relation of beauty to truth, the confrontation between good and evil, the nature of history, and the existence of God. Emphasis will be on the novel itself, but some attention will be given to critical sources. May Experience ONLY. 2 credits.

269 Art and Religion in Turkey
This course has two foci: aesthetic and religious. The aesthetic focus will be on the art of Byzantine (Eastern Christian) and Islamic sites in Turkey. Particular emphasis will be given to church architecture and icons, both of these being central features of Eastern Christian liturgy; and to the architecture of mosques. Because Eastern Christian and Islamic art did not (and does not) exist apart from religious life, the relationship between art and religion (i.e., between aesthetics, on the one hand, and, on the other hand, religious orthodoxy and orthopraxy) will be the other central focus. Some attention will also be given to Greek and Roman architectural forms, since they form the basis for developments in both Byzantine and Islamic architectural styles. May Experience ONLY. 2 credits.

270 Religious Studies in Turkey
Survey of religious history in Turkey with focus on early Christianity, Byzantine Christianity and Islam in the Ottoman Empire and the modern period. May Experience ONLY. 2 credits.

271 Contemporary Southern Baptists
Social and theological developments in the post 1960s South and considers how they are changing the Southern Baptist Convention. Includes class visits to Greenville churches and interviews with local Baptist leaders that exemplify the change and tensions. Congregational field studies required. May Experience ONLY. 2 credits.
272 Jimmy Carter: Southern Baptist
Interaction between President Jimmy Carter’s Baptist heritage, his career, and thought. Studies how this interaction reflects recent developments in Baptist polity and theology. Field trips to Carter Center, Carter National Historic Site, and possibly an interview with Carter. May Experience ONLY. 2 credits.

273 Malcolm X
Examining the social and religious impact of Malcolm X’s life and activism. May Experience ONLY. 2 credits.

274 Judaism in the Time of Jesus
Focuses primarily on extrabiblical primary sources for Judaism from the first century CE, with some attention to Jewish sources from a wider time frame (c. 2nd century BCE through 6th centuries, CE). May Experience ONLY. 2 credits.

275 Theology of Paul Tillich
Paul Tillich’s philosophical theology with special attention to his analysis of meaning and its apparent loss in modern society. Students will examine Tillich’s interpretation of faith, doubt, religion, courage and truth as well as the role of these concepts in his theology of culture. May Experience ONLY. 2 credits.

276 Religion and Black Popular Culture
Exploration of intersection of religion and African-American popular culture as depicted in movies, television, music and literature including consideration of influences both external and internal. May Experience ONLY. 2 credits.

310 Old Testament Prophets
GER: HA (Historical Analysis of Human Interactions)
Study of the phenomenon of Hebrew prophecy and the Hebrew prophets in their historical context, with emphases on the literary forms of prophetic literature and the social, political, and religious values of the prophets. 4 credits.

311 Wisdom Literature
GER: UQ (Ultimate Questions)
Study of Proverbs, Job, Qoheleth, and other Wisdom writings of the Hebrew Bible and Apocrypha, and their relationship to other literature, ancient and modern. Topics include: pain and suffering, the origin and nature of evil in a theocentric world, and the nature of the good life. 4 credits.

312 Ancient Israelite Religion
The history and development of religious life in ancient Israel from its beginnings in Bronze Age Canaan to the emergence of Judaism in the 5th Century BCE. Topics include: the emergence of monotheism out of Israel’s polytheistic context; conflicts over orthodoxy, heterodoxy, and syncretism; the details of Israel’s cultic practices, including sacrifices, communal gatherings, and varieties of religious leadership; and the place of the goddess and other feminine dimensions of deity. 4 credits.

314 The Torah
GER: TA (Critical, Analytical Interpretations of Text)
Examination of the literary, historical and religious dimensions of the first five books of the Hebrew Bible. Topics include the compositional history of the text and the development of ancient Israelite religion. Special attention given to contemporary issues in interpretation, including feminist, sociological and postmodern approaches to the text. 4 credits.

315 The Bible and the Arts
GER: UQ (Ultimate Questions)
The history of biblical interpretation, with special emphasis on the interaction of biblical theology with great works of art from the Christian and Jewish traditions. Emphasis will be on visual art from the Medieval and Renaissance periods, but modern art as well as some sacred music will also be considered. 4 credits.

316 Biblical Text and Canon
GER: UQ (Ultimate Questions)
Historical study of the origin of the Christian Bible with particular emphasis on the processes involved in the preservation of the text, determination of canonicity, and the issues of meaning involved in the concepts of inspiration, authority, and canon. Study of the factors, historical, social, and theological, that prompted the genesis and final form of the biblical canon. 4 credits.

317 The Bible and Gender Politics
GER: UQ (Ultimate Questions)
Survey of a variety of feminist approaches to biblical interpretation, with primary focus on the New Testament and early Christian literature. Issues of concern include women’s leadership roles in early Christianity, competing definitions of masculinity in early Christianity; and constructions of sexuality in the ancient world. The social location of modern day interpreters and questions of authority of Scripture will also be considered. 4 credits.

318 Jesus and the Gospels
GER: TA (critical, analytical interpretation of texts)
Exploration of early Christian gospels, both canonical and non-canonical, focusing on the distinctive literary features of each of the four canonical gospels and the relationships among them. Also, modern quests for the historical Jesus, raising questions of the relationship between narrative, history, theology and text. 4 credits.

319 Paul’s Life and Thought
Introduction to the writings and social world of Pauline Christianity. Topics include: Paul and “the Jews,” his collaboration and conflict with women, and slavery in early Christianity. Includes examination of how Paul’s authority is appropriated by later Christian authors, and how the character Paul is portrayed in early Christian fiction. 4 credits.
322 Muhammad and the Qur’an
Prerequisite: one course in Religion
Exploration the Life of Muhammad and the origins of the Qur’an from historical critical perspective. Special attention is given to new lines of scholarship which challenge traditional Muslim understandings of the origin of Islam. 4 credits.

323 Women, Gender, Islam
GER: WC (World Cultures)
Investigation into the role of gender in Islamic sacred texts, religious practice and law, and Muslim history. The relationship between cultural and religious attitudes toward gender in Muslim societies, and links between Orientalist and Islamist (fundamentalist) discourses on gender will be explored. 4 credits.

325 Women and Power in Hinduism
GER: UQ (Ultimate Questions) and WC (World Cultures)
Exploration into Hindu women’s religious lives and the female nature of power in Hindu cosmology, mythology, and society. Attention given to the complex interrelationships among mythic, domestic, and economic gender hierarchies, particularly in the contemporary cultural context. 4 credits.

327 East Asia Buddhism: The Way of the Bodhisattva
GER: UQ (Ultimate Questions) and WC (World Cultures)
Aspects of East Asian Buddhism, focusing on the Bodhisattva model. The development of early Indian Buddhism and its role in the debate between early Buddhist schools and the emergent Mahayana views. The role of this model in the hagiographic traditions of Buddhist monks, nuns, founders, and saints. Special attention given to the pantheon of Bodhisattva Savior figures, such as Guan Yin (Kannon), Dizong (Jizo), and Milo (Maitreya). 4 credits.

331 History and Theology of Christian Worship
GER: UQ (Ultimate Questions)
Introduction to the study of Christian worship, surveying the history, theology, and diversity of worship texts and practices throughout its many social contexts. Liturgical practices of various historical periods will be identified and critiqued, leading to an exploration of Christian worship in the current postmodern and multicultural context. 4 credits.

340 Faith and Ethics
GER: UQ (Ultimate Questions)
Study of human values and conduct in light of the basic affirmations of Christian faith. Topics include: the nature of moral reasoning, the use of the Bible in Christian ethics, the relationship between religious faith, the moral life, and social justice, comparison of Christian ethics with those of other faith traditions, and contemporary ethical problems. 4 credits.

341 Religious Pluralism
GER: UQ (Ultimate Questions)
Study of Christian and non-Christian attitudes toward the plurality of religions. Focus on the variety of theological responses to religious pluralism and their implications for interfaith dialogue. A historical survey of western attitudes toward religious diversity is also undertaken. Readings include both theological and literary works. 4 credits.

342 Christian Thought
Developments in Christian thinking through periods of crucial formulation and change, such as the sixteenth-century Reformations or the Enlightenment and early Romanticism. Focus on such issues as interpretation of Scripture and the relation of head and heart in faith. 4 credits.

343 Liberation Theology
GER: UQ (Ultimate Questions)
Examining some of the classic texts in Latin American and feminist liberation theology and understanding their sources, methods, hermeneutics, and primary themes. In addition, attention will be devoted to German political theology in its call for a radical transformation of theology in light of the massive suffering in human history. 4 credits.

344 Black Liberation and Womanist Theology
The history, provocations, themes in and critics of black liberation theology and womanist theology. Writers studied include: James Cone, Dwight Hopkins, Emilie Townes, Katie Cannon, and Jacquelyn Grant. Examining the ways in which these writers construct “blackness” and the role of Christian theology and ethics in addressing black oppression and white supremacy. Also, critics of black liberation and womanist theology. Examining the writings of critics like Anthony B. Pinn and Victor Anderson and discussing their critiques of black liberation and womanist thought. 4 credits.

348 Augustine of Hippo: His Life and Thought
GER: UQ (Ultimate Questions)
Prerequisite: one course in Religion
In-depth examination of life and work of Augustine of Hippo. Works from all stages of his career, and focus on how his thought developed in its historical context. 4 credits.
360 Women and Religion in the West  
GER: UQ (Ultimate Questions)  
Investigation into the roles of women, feminine images, and women’s issues in Western religion, especially in Christianity and Judaism. Exploration of the methods and formative writings of feminist and womanist scholars in Bible, ethics, theology, etc. 4 credits.

361 Religion and Science  
GER: UQ (Ultimate Questions)  
Comparative study of these fundamental interpretative systems, examining historical conflicts (especially Copernican astronomy and evolutionary theory), the nature, methods, and presuppositions of each, and contemporary issues involving both. 4 credits.

362 Religion and the Environment  
GER: NE (Humans and the Natural Environment)  
The relationship of religious traditions to the natural world, in historical, theological, and ethical perspectives. Topics include: human attitudes to nature; biblical traditions concerning creation; Christian and scientific views of nature; the current ecological crisis; and resources for respecting nature within the world’s spiritual traditions. 4 credits.

363 Religion and Sexuality  
GER: UQ (Ultimate Questions)  
Prerequisite: any one course in religion  
The theology of sexuality, the connection between sexuality and spirituality, gender relations, and sexual orientation. The intersection between ethics and sexuality, including singlehood, marriage, celibacy, sexual violence and pornography. 4 credits.

401 Theory and Method in the Study of Religion  
An introduction to the central methodological issues in the study of Religion. It is intended to help students reflect systematically and critically on “religion” as a category and on the ways in which scholars have defined and approached the field. Religion majors only. 4 credits.

475 Senior Seminar  
4 credits.

504 Directed Independent Study  
Variable credit.
211 Introduction to Criminology  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101  
Introduction to the field of criminology. Topics include the criminological enterprise, measuring criminal behavior; victims and criminals--profiles; theories of crime causation--biological, psychological, and sociological; crime typologies--violent and property. Police, courts and corrections will also be briefly discussed. 4 credits.

212 Law and Society  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101 or PSC-101  
Explores the relationship between law and society from a sociological perspective. Four key areas will be explored: sociological and socio-legal approaches to the study of law, legal institutions, legal actors, and law & social change. Primary emphasis on the interaction between society and law – how social forces influence the nature and content of law and how law influences behavior and beliefs. 4 credits.

213 Deviance and Social Control  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101  
Examination of the different perspectives on how deviance is defined, factors that contribute to the likelihood of individuals being deviant, and finally, the forces that may prevent deviance. In discussing these three conceptual areas this class will deal with several classic as well as current substantive topics in the study of deviance, such as school shootings, bachelorette parties, gangs, soccer hooligans, Ponzi schemes, drug use in college, teen deviance, bankruptcy, and the Mafia. 4 credits.

215 Cultures of Control  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101  
State control in contemporary American society, showing how organizational cultures of control come to exist in their present form and what kinds of consequences follow. Exploration of “law in action;” how powerful bureaucratic structures interpret criminal law and apply it to individuals. Fundamental problems encountered in the administration of the American criminal justice system. It analyzes how the system of law and social control works by examining various components--lawyers, police, courts, and corrections. Each component is examined as an organizational structure with its own needs and interests. Also studied is the interaction between the various components of the criminal justice system and larger legal, political, and social communities. 4 credits.

221 Population, Economy and Society  
**GER: HB (Empirical Study of Human Behavior) and NE (Humans & the Natural Environment)**  
Prerequisite: ECN-111, SOC-101 or 201  
Same as ECN-235. Explores the trends and determinants of vital events such as fertility, mortality, marriage, divorce and migration from sociological and economic perspectives.

222 Population and Environment  
**GER: HB (Empirical Study of Human Behavior) and NE (Humans & the Natural Environment)**  
Prerequisite: SOC-101  
Analysis and review of basic population theory and trends, including a detailed study of the effects of demographic components (fertility, mortality and migration) on contemporary human society and the environment. Students may not receive credit for both ECN-235 or SOC-221 and SOC-222. 4 credits.

223 Urban Community  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101  
Explorations of the dynamics of urbanization and urbanism, with an emphasis on American cities. The roles of urban places, institutions, and lifestyles are explored in depth. 4 credits.

225 Sociology of Development & Globalization  
**GER: WC (World Cultures)**  
Prerequisite: SOC-101  
Explores development in the Third World, with a special focus on the continent of Africa. Addresses the question why such a large gap between rich and poor countries exists, why this gap is increasing, and how sociologists and global institutions such as the World Bank have addressed this problem. Issues of the environment, sustainability, the role of women in economic development, the WTO and the push for free trade and social problems in the Third World such as unemployment, poor labor conditions, industrialization, and ethnic conflict will also be addressed. 4 credits.

231 Media, Culture and Society  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101  
Examination of the relationship between media and society. Covers various aspects of media, including television, radio, movies, popular music, the internet, advertising and public relations. Addresses the issue of how social forces shape media content, especially public and political interests. Also examines how needs of media organizations influence images and ideas presented. Considers ways in which media influences society. 4 credits.

232 Sociology of Contemporary Families  
**GER: HB (Empirical Study of Human Behavior)**  
Prerequisite: SOC-101  
Examining historical and current variation in the institution of the family, the construction of the “ideal” family and the impact of this construction for how the family as an
233 Sociology of Religion
Prerequisite: SOC-101
Analysis of the role of religion, as an institution, in the social world. Focus will be at both the organizational, how religious groups form and grow, and the individual, how religion may influence or impact particular behaviors, levels. Most of the substantive material will center on religion in the United States, although some discussions of other contexts, as a comparison, will be made. This course will not address the philosophical truth or validity of particular religious beliefs. 4 credits.

234 Medical Sociology
GER: HB (Empirical Study of Human Behavior)
Prerequisite: SOC-101 and permission of instructor
Introduction to the sociological study of medicine and the applications of sociology in medicine, emphasizing the sociocultural aspects of health and illness. Requires extensive field work at a Greenville hospital. Entry is by application only. Course must be enrolled with PHL-302 and IDS-301. 4 credits.

235 Sociology of Education
Prerequisite: SOC-101
Examination of the social aspects of education and schooling: the interaction between home, society and educational institutions; the ways that social inequities are reproduced through schools; and the ways that identities are formed through education. 4 credits.

241 Social Class in America
GER: HB (Empirical Study of Human Behavior)
Prerequisite: SOC-101
Analysis of social stratification, status and social class in the United States. Relationship of social class to social intimacy, style of life, values, mobility and the socialization process. Structure and function of power systems. 4 credits.

242 Sociology of Gender
GER: HB (Empirical Study of Human Behavior)
Prerequisite: SOC-101
Analysis of the role of gender in society. Exploration of the ways gender differences are culturally reproduced transforming male and female biology into masculinity and femininity. Historical and cross-cultural examples are examined as well as a discussion of the nature or nurture debate. Consideration of the influences of the family, media and language are included. Additional attention is paid to the role of gender in the social institutions (e.g., education, work, health care). 4 credits.

243 Race and Ethnic Relations
GER: HB (Empirical Study of Human Behavior)
Prerequisite: SOC-101
An exploration of racial, ethnic and religious minorities in United States and around the world. Topic covered include “race” and social identities; stigmatization and prejudice; inter-group cooperation, collusion and competition. 4 credits.

251 Social Movements and Collective Behavior
GER: HB (Empirical Study of Human behavior)
Prerequisite: SOC-101
Broad examination of social movements, considering movement emergence, movements’ influence on social institutions, and movement success and failure. Special emphasis on framing, counter-framing collective identities, and internal dynamics of solidarity and division. A wide variety of case studies will be highlighted, ranging from the civil rights movement to transnational anti-systemic movements today. 4 credits.

260 Global Health Inequities
GER: HB (Empirical Study of Human behavior) and WC (World Cultures)
Prerequisite: SOC-101
Examination of structural factors (e.g. poverty, post-colonialism) that lead to the unequal distribution of health across the world. Investigation of morbidity, mortality, epidemics; cultural factor shaping ideas about illness and healing; varying health care delivery systems, NGOs, etc. 4 credits.

261 Self and Society
GER: HB (Empirical Study of Human behavior)
Prerequisite: SOC-101
Examination of the self at the intersection of the individual and society with particular attention to the interdependent nature of micro-level interactions and macro-level structures and institutions. Exploration of how sociologists understand the relationship between the self and society, surveying the fields of symbolic interactionism, social structure and personality, ethnomethodology, role theory, social exchange theory, phenomenology, social constructionism, and the life course. 4 credits.

270 The Social Evolution of a Southern College
Exploring the social evolution of Furman University using both archival material housed in the Special Collections Department and student-conducted interviews of faculty and staff. A focus on key changes related to student life and culture, the composition of the student body and faculty (issues of race, gender, class), general institutional goals and curriculum, and the place of Furman in the larger community. May Experience ONLY. 2 credits.
301 Sociological Theory
Prerequisite: SOC-101
Philosophical and historical influences on classical sociological theory. This course introduces and critically analyzes the sociological theories of Marx, Weber, Durkheim, and Mead, as well as more recent theoretical work following these classic traditions. 4 credits.

302 Methods of Social Research
Prerequisite: SOC-101
Introduction to the basic techniques of social research including both quantitative and qualitative methods. Focus will be on strategies for conducting effective and valid research, as well as evaluating and critiquing social research. Team-based research projects are developed which are then completed in SOC-303. 4 credits.

303 Quantitative Research Seminar
Prerequisite: SOC-302
Continuing introduction to basic techniques of statistics including descriptive and inferential statistics with an emphasis on the application and critical consumption of statistics. Completion of quantitative research project begun in SOC-302. 4 credits.

470 Qualitative Research Seminar
Prerequisite: SOC-101, SOC-302, and at least one more sociology course numbered 200 or greater
Advanced reading, research and discussion course for majors covering a specific topic in sociology. Topics vary by instructor and term and could include such topics as Sociology of Emotions, Masculinities or Ethnography of Everyday Life. Special emphasis on qualitative methodology. This course requires an independent or collaborative research project. May be repeated for credit based on change of topic. 4 credits.

471 Advanced Qualitative Methods
Prerequisite: SOC-470
Advanced training in qualitative methods such as participant-observation and in-depth interviews. Students will learn how to design and conduct an independent research project in order to make a substantive or theoretical contribution to previous academic literature. May Experience ONLY. 2 credits.

475 Sociology Seminar
Prerequisite: SOC-101 and at least one more course numbered 200 or greater in sociology
Advanced reading, research and discussion course for covering a specific topic in Sociology. Topics vary by instructor and could include such topics as Organized Deviance, Environmental Sociology, Marginal in the US or Youth and Adolescence. This course requires an independent or collaborative research project. May be repeated for credit based on change of topic. 4 credits.

501 Independent Study
Prerequisite: instructor permission
Prospectus for study must be presented to instructor and approved in the term preceding registration for the course. Variable credit.

503 Individualized Internship
Prerequisite: SOC-101 or 102, at least one sociology course numbered 200 or greater and a GPA of 2.80 or greater in the major
Practical experience in a variety of local social service agencies. Interns complete at least 120 hours of on-site activities relating to their internship objectives, participate in scheduled seminar meetings, workshops, and field research exercises, and meet regularly with the internship director and agency supervisor. Course cannot be enrolled with a pass-no pass grading option. Variable credit.
Theatre Arts

Professor: Bryson
Associate Professors: Caterisano, Oney (Chair)
Assistant Professor: Azar
Adjunct: Adkins, Cook, Frazier

All majors are required to participate in every department production and to complete the following course requirements:

- four semesters of THA-001,
- THA-101, 115, 116, 120, 210, 211, 310, 430,
- at least two of the following courses: THA-315, 316, or 317, and
- at least two more from the following group of courses: ART-111, 113, 124, ENG-303, 342, 343, THA-112 and 113, 140, 220, 223, 224, 230, 240, 320, 350, 410, 440 or 501.

Theatre Arts (THA) Courses

001 Theatre Practicum
Significant participation in the department’s theatre productions as determined by the faculty, including, but not limited to, serving as a cast member, in stage management, as a crew head or as an assistant to a designer. 0 credit.

101 Introduction to Theatre
GER: VP (Visual and Performing Arts)
Script analysis, dramatic structure, production styles, introductory overview of acting, directing, design, and technical elements of production. Participation in some phase of play production (backstage or onstage) or a creative project is part of the course. 4 credits.

111 Introduction to Acting
GER: VP (Visual and Performing Arts)
Training in the basic element of the actor’s craft. Exploration of the study and practice of realistic acting principles. Work will center on modern scene study, exercises and observation. No credit for students who have previously successfully completed THA-120. 4 credits.

112 Makeup
Principles of makeup design for the theatre based upon play reading and script analysis. Techniques of application limited to the painterly approach and beginning three-dimensional techniques. Compilation of a resource file of graphic images provides the basis for design choices. 2 credits.

113 Sound Design
Study of the history of theatre sound design and production. Introduction to sound recording, digital sound capturing and editing, microphones and sound reinforcement techniques. Students complete design projects related to theatrical production. 2 credits.

115 Stagecraft
Prerequisite: THA-101 and THA-111 or 120
Technical theatre nomenclature, tools, materials, rigging, scene painting and standard construction techniques for standard theatrical scenery. Laboratory required. 4 credits.

116 Costume Crafts
GER: VP (Visual and Performing Arts)
Principles of costume technology, including basic sewing/construction techniques, fabric identification, and modification technique; and crafts techniques, such as millinery, armor construction, and dyeing and painting. Laboratory required. 4 credits.

120 Acting
Fundamentals of acting technique including script reading and analysis, movement, vocal development, and performance theory and practice. Theatre Arts and Vocal Performance majors ONLY. 4 credits.

140 Digital Technology for the Theatre
Introduction to hardware and software technologies used in theatrical production, study, research and analysis. Students produce projects directly related to theatre scholarship, design and practice in such areas as graphics, database, audio and video production and editing, html and web publishing, page layout, and design. Laboratory required. 4 credits.

210 Theatre History I
A survey of classical Greek and Roman theatre, the theatre of medieval Europe, Renaissance Italy, France and Japan, Golden Age Spain, Elizabethan and Restoration England, and Baroque France. 4 credits.

211 Theatre History II
A survey of theatre history from the end of neo-classicism through German romanticism and on through realism. Includes elements of twentieth-century eclecticism such as epic theatre, the theatre of the absurd, and the theatres of participation, confrontation, protest and ritual. 4 credits.

220 Acting II: Characterization
Prerequisite: THA-120
Advanced acting techniques with emphasis on exploration and development of character through play reading and analysis, improvisation, ensemble acting, experimentation and performance. 4 credits.
The Actor’s Voice
Exploration of vocal production for the theatre using a variety of methods including articulation for the stage, developing character voices and stage dialect. 4 credits.

Movement for the Actor
Exploration and development of the actor’s physical expression for the stage. Includes stage combat, period styles, mask work, and other methodologies that can be applied to theatrical performance. 4 credits.

Readings in Dramatic Literature
GER: TA (Critical, Analytical Interpretation of Texts)
Study in depth of the dramatic literature of a particular historical period, genre or nation. The topic changes depending on the instructor teaching the course. Offerings might include readings in Irish Theatre; Restoration Theatre; Theatre of the Absurd; Nineteenth Century Realism; Late Twentieth and Early Twenty-First Century American Theatre. 4 credits.

Playwriting
GER: VP (Visual and Performing Arts)
Introduction to and practice in the art and craft of playwriting for the stage. Emphasis on play structure, character development and dialogue. Students write frequently, read their work in class and complete a 10-minute play and a one-act play. 4 credits.

Directing
Prerequisite: THA-120
Introduction to modern directing theory and strategies, including script analysis, casting and rehearsal techniques, and direction of a one-act play for public performance. 4 credits.

Scene Design
Prerequisite: THA-101, 115, 116 or 120
Exploration of theatrical perspective drawing techniques. Analysis, research and execution of selected scenic design projects. Completion of ART-111, 113 or 124 helpful, but not required. 4 credits.

Costume Design
Prerequisite: THA-101, 115, 116 or 120
The costume design process, from elements and principles of design to analysis of script and character, historical research, and methods of rendering. Completion of ART-111, 113 or 124 helpful, but not required. 4 credits.

Lighting Design
Prerequisite: THA-101, 115, 116 or 120
Introduction to the history and practice of theatrical lighting design, including basic electricity, instruments, control, analysis, research and execution of design projects. Lab required. 4 credits.
Urban Studies Program

Professors: Benson, Halva-Neubauer (Director), Peterson
Assistant Professor: Passell

The major in urban studies provides students with an interdisciplinary perspective on the forces of urbanization, urban growth and decline, urban life, and urban problems.

A major in urban studies must include:

• ECN-111, PSC-101, and SOC-101,
• ECN-225, MTH-241, PSC-150 or SOC-303,
• two of the following four courses: ECN-234, HST-321, PSC-208, and SOC-223, and
• at least five additional courses from the list below.

For course descriptions, see listings under individual departments.

EES-201 Introduction to Geographic Information Systems
ECN-234 Urban Economics
ECN-237 Economics of Poverty and Inequality
ECN-238 Public Finance
ECN-250 Labor Economics
HST-233 American Immigration History
HST-321 History of Urban and Suburban America
PSC-203 Judicial Process and the U.S. Supreme Court
PSC-204 Civil Rights and the U.S. Constitution
PSC-205 Public Policy and Administration
PSC-207 State Politics
PSC-208 Urban Politics
PSC-210 Interest Groups and Political Movements
PSC-211 Racial and Ethnic Politics
PSC-506 Fieldwork in State and Local Public Affairs
SOC-211 Introduction to Criminology
SOC-213 Deviance and Social Control
SOC-222 Population and Environment
SOC-223 Urban Community
SOC-241 Social Stratification
SOC-243 Race and Ethnic Relations

Urban Studies (UST) Courses

117 Rebuilding New Orleans
Community-based service learning project in New Orleans researched, designed, and revised by participants. Work together with people in New Orleans to re-establish or continue to rebuild a key component of the city’s infrastructure. Immersion in city’s varied spaces and narratives. May Experience ONLY. 2 credits.

501 Independent Study
Guided research normally focused on urban development. Variable credit.
Medals and Awards

Richard W. Riley Award for Promise and Achievement

The Riley Award was created in 2012 in honor of Richard W. Riley, a 1954 Furman graduate and chair of the Board of Trustees. Awarded to a member of the community who has been a strong and ardent Furman supporter. Not awarded in 2013.

Meritorious Teaching Award

The Alester G. Furman, Jr., and Janie Earle Furman Award for Meritorious Teaching. Through the benefaction of the late Mr. Alester G. Furman, Jr., and Mrs. Furman, an annual cash award for meritorious teaching is made to the member or members of the faculty judged to have been most effective in undergraduate teaching during the current academic session. Any member of the faculty who has taught one or more courses during the session is eligible.

Recipients are selected by an unannounced selection committee, composed of faculty and students, appointed annually by the president. The selection is announced at spring commencement.

In considering prospective recipients, the selection committee places primary emphasis upon the following aspects of teaching: the inspiration of students toward an enthusiastic interest in an academic discipline and in learning in general, evidence of professional competence in the teacher’s field, and interest in the academic and personal welfare of students, both within and outside the classroom. Nominations for the award with supporting information may be submitted in writing in sealed envelopes by faculty or students to the Vice President for Academic Affairs by April 15 each year.

The Meritorious Teaching Award was won in 2013 by John C. Shelley and Alan Scott Henderson.

Meritorious Advising Award

The Alester G. Furman, Jr., and Janie Earle Furman Award for Meritorious Advising. This annual award, made possible by an additional gift from the Furman family, recognizes a member of the faculty who, in the opinion of students, other faculty, and alumni, is an exceptional academic advisor.

Recipients are selected by an unannounced selection committee on the basis of written nominations sent to the Vice President for Academic Affairs by April 15 of each year. The factors considered by the selection committee are each nominee’s long-term commitment to advising, rapport with students, concern for advisees’ career goals and future plans, willingness to seek answers to advisees’ questions, knowledge of university regulations and curriculum, and effectiveness in directing students toward productive college experiences.

The Meritorious Advising Award was won in 2013 by Nelly J. Hecker and John F. Wheeler.

Chiles-Harrill Award

The Chiles-Harrill Award, provided through the benefaction of Mr. Frank Keener ’64, is an annual cash award to a member of the faculty or administrative staff considered to have made substantial contributions to the lives of students. The award honors Marguerite Moore Chiles, former vice president for student services, and Ernest E. Harrill, professor emeritus of political science and former dean of students. Recipients are selected by an unannounced committee composed of faculty, staff and students.

The Chiles-Harrill Award was won in 2013 by Sean O’Rourke, Professor of Communication Studies.

Furman University Scholarship Cup

Donated by Hales Jewelers. Awarded to the senior with at least 64 semester hours at Furman who earns the highest grade point average. Won in
2013 by Corey Nathaniel Allen, Matthew Daniel Correnti, Taylor Nicole Davidson, Rachel Anne Donaldson, Thomas Tyler Hydrick, and Caroline Elaine Wagner.

 Bradshaw-Feaster Medal for General Excellence. Endowed by the late Dr. S. E. Bradshaw in continuation of the medal provided by the late W. L. Feaster ‘13. Awarded by the faculty to a senior man on the bases of scholarship, general culture, participation in college activities, high moral character. Won in 2013 by Matthew Daniel Correnti.

 Donaldson-Watkins Medal for General Excellence. Given by the late Mrs. Elizabeth Wilson Donaldson and the late Mrs. Maude Wakefield Watkins, members of the class of 1889. Awarded by the faculty to a senior woman on the bases of scholarship, general culture, participation in college activities, high moral character. Won in 2013 by Emily Elizabeth Wirzba.

 President’s Award. Awarded by a committee of faculty, administrators and students to seniors for qualities of scholarship, leadership, service, and participation in college and community activities. Won in 2013 by Anna Marie Bower and Benjamin Robert Saul.

 American Legion Medal. Awarded by the American Legion, South Carolina, to a senior man and a senior woman for qualities of honor, courage, scholarship, leadership and character. Won in 2013 by Rachel Anne Donaldson and Raul Gabriel Rodriguez.

 Alfred S. Reid Award. Certificate awarded by the Furman chapter of Omicron Delta Kappa to the man in each class who has made the best all-around contribution to the improvement of the university and student life during the year. Won in 2013 by John Stephen Tagert, Andrew J. Mueller, John Austin Charles and Nathan Lewis Thompson.

 Winston Babb Memorial Award. Plaque awarded by the Furman chapter of Omicron Delta Kappa to the woman in each class who has demonstrated the most outstanding qualities of leadership, scholarship and service to the university. Won in 2013 by Laura Mackenzie Harbin, Christina Dorismond, Qidan Guo, and Julia Christine Roberts.

 Ancient Greek and Roman Studies Award for excellence in Ancient Greek and Roman Studies (2001). Won in 2013 by Chelsea Patterson Brewer.

 Asian Studies

 Award for outstanding work in Chinese studies (2004). Won in 2013 by Chandler Matthew Barton.

 Award for outstanding work in Japanese studies (2004). Won in 2013 by Earl Henry Honeycutt III.

 Biology

 Elizabeth Thackston Taylor Botany Medal (1942). Established by the late R. K. Taylor, Jr., ’31 in memory of his mother. Awarded by the biology faculty to the student with the greatest interest and aptitude in field study of plants of the Piedmont. No student is eligible a second time. Won in 2013 by Jennifer Leigh Summers.

 Beta Beta Beta General Excellence Award (1974). Annual monetary award to a junior or senior biology major for outstanding academic achievement and unselfish service. Won in 2013 by Katrina Marie Morgan.


 Business and Accounting
 Fred and June Current Accounting Award (2003). Award presented each year to an outstanding graduating senior majoring in accounting who has shown high academic achievement,
has demonstrated leadership in the Furman Accounting Society, and who has actively participated in other campus organizations that have a primary goal of serving others. Won in 2013 by Daniel Charles Smith.

**General Excellence in Business Award (2003).** Award presented each year to a graduating senior business major who has exceptionally strong academic achievement, a proven work ethic, leadership ability and well diversified extracurricular activities. Won in 2013 by Daniel James White.

**Lawrence Kessler Award for Excellence in Accounting (2006).** Won in 2013 by William Albert Crooks.

**Chemistry**

**John Sampey Award in Chemistry (1968).** Cash award to an exceptional graduating chemistry major, based on meritorious scholarship, strength of character and promise of a productive scientific career. Won in 2013 by Matthew Daniel Correnti, Hillary Denise Rodgers, and Kristen Elizabeth Watts.

**John Albert Southern Award in Chemistry (1973).** Won in 2013 by Ahmad Rami Dbouk.

**American Chemical Society Outstanding Senior Award (1954).** A year’s membership in the American Chemical Society (ACS) by the Western Carolinas Section of ACS, awarded to the senior member of the student chapter with the best record in chemistry. Won in 2013 by Ahlam Michelle Armaly.

**The American Institute of Chemists Award in Biochemistry (1984).** Won in 2013 by Jacquelyn Taylor Gilbert.

**The American Institute of Chemists Award in Chemistry (1984).** Won in 2013 by Joseph Luther Killian.

**Classics**

**J. S. Murray Greek and Latin Prizes (1928).** Two prizes, one in Greek and one in Latin, established by the late Dr. John Scott Murray. Greek Prize won in 2013 by Nora Katherine Phillips. Latin Prize won in 2013 by Chelsea Patterson Brewer.

**Communication Studies**

**Endel Medal for Excellence in Communication Studies (1926).** The department’s highest award honors the outstanding student or students in Communication Studies. Won in 2013 by Andrianna Lee Lawrence.

**Endel Medal for Excellence in Rhetoric and Oratory (1926).** The award honors a Communication Studies student or students whose work in rhetoric exemplifies the highest standards. In granting the award, the department’s committee considers excellence in scholarship but may also consider a student’s efforts to improve the quality of public discourse in, and service to, the department, the university, and the community. Won in 2013 by Evelyn Christensen Henson and Jessica Anne Pate.

**Endel Medal for Excellence in Mass Communication (1937).** This award recognizes a Communication Studies student or students whose work in mass communication exemplifies the highest standards. In granting the award, the department’s committee considers excellence in scholarship, but may also consider a student’s service to the department, university, and community. Won in 2013 by Zachary Siedgried Treu and Elizabeth Greer Wallin.

**Communication Studies Award for Excellence in Public Speaking & Debate (1926).** This award recognizes excellence in effective and ethical public speaking and debate by a Communication Studies student or students. In granting the award, the department’s committee considers both the quality and the quantity of the student’s public discourse, and particularly values those who practice what the Greeks called parrhesia, “fearless speech,” speech based on moral principle and delivered in the face of powerful opposition. Won in 2013 by Katherine Lee Schuitema.
The Charles A. Batson Award (2004). The award recognizes excellence in the intellectual, ethical and aesthetic aspects of broadcast journalism by a Communication Studies student or students. The recipient must display a strong commitment to the liberal arts as well as to broadcast journalism. Won in 2013 by William Rivers Townes.

Computer Science

Earth and Environmental Science
Wallace C. Fallaw Outstanding Senior Award in Earth and Environmental Sciences (1996). Won in 2013 by Ryan Turner Richardson.


Economics

Education
Outstanding Scholar and Leader in Education Award (2005). Won in 2013 by Anna Thomson Sheppard.

English

Environmental Studies

Health Sciences
Jerry R. Thomas Award in Health Sciences (1996). Awarded to a graduating Health Sciences major who has shown unusual professional growth, interest and service, and who exemplifies the desired characteristics of a physical educator. Won in 2013 by Tayla Rene Howard.

Ruth Reid Award (2005). Award presented to a graduating Health Sciences major who will be certified to teach health and physical education who exemplifies the attributes of a dedicated teacher. Won in 2013 by Karen Naomi Woods.

History
Endel Memorial History Medal (1937). Founded by the late Mrs. H. Endel as a memorial to her husband and awarded to the man doing the best work in history. No student is eligible a second time. Won in 2013 by Thomas Tyler Hydrick.

Gilpatrick History Prize (1937). A cash prize, given by Choice McCoin '57 as a memorial to Delbert H. Gilpatrick, professor of history emeritus, and Meta E. Gilpatrick, professor of English emeritus, and awarded to a woman for outstanding work in history. No student is eligible a second time. Won in 2013 by Alyssa Ryann Gillis.

Mathematics
DeLany Medal in Mathematics (1945). A gold medal given by William J. DeLany '42 to the graduating senior mathematics major earning the highest grade point average in upper-level mathematics courses. Won in 2013 by Matthew Daniel Correnti.

Mathematics Faculty Award for Excellence (2005). Presented to the graduating senior mathematics majors whose grade point average in upper-level mathematics is 3.80 or higher. Won in 2013 by Matthew Daniel Correnti and Aaron Douglass Markham.

Military Science
Distinguished Military Graduate Award (2011). Won in 2013 by Joshua Carroll Tadlock.

Modern Languages and Literatures
Goethe Award in German (1969). Won in 2013 by Amanda Marie Michalski.
**Cervantes Award in Spanish (1969).** Won in 2013 by Landri Alison Tripp.

**Music**

*DuPre Rhame Award.* Won in 2013 by Caleb Hopkins.

*Dan A. Ellis Award.* Presented to the outstanding freshman band member by the Furman Band and Iota chapter of Kappa Alpha Order in honor of Dan A. Ellis. Won in 2013 by Alex Helms and Brent Patteson.

*Jake Rasor Award.* Won in 2013 by Timothy M. Sullivan.

*John Carmichael Award.* Won in 2013 by Josh Wenzell.

*Sigma Alpha Iota Scholastic Award.* Won in 2013 by Ann Kucharski.

*Sigma Alpha Iota College Honor Award.* Won in 2013 by Sara Glogowski.

*Sigma Alpha Iota St. Cecilia Scholarship.* Won in 2013 by Coleman R. Alexander.

*Phi Mu Alpha Lockhart Music Award.* Won in 2013 by Molly Tucker McClure.

*Phi Mu Alpha Goldsmith Music Award.* Won in 2013 by Kristina Mariela Pardo.

*Phi Mu Alpha Sinfonia Scholastic Award.* Won in 2013 by Adam C. Collins.

*Phi Mu Alpha Sinfonia College Honor Award.* Won in 2013 by Timothy M. Sullivan.

*Vince Perone Outstanding Bandsman Award.* Won in 2013 by Scott D. Strickland.

*The Presser Scholar.* Won in 2013 by Andrew B. Koch.

*The Mattie Hipp Cunningham Scholarship.* Won in 2013 by Scott D. Strickland.

**Philosophy**

*Philosophy Medal (1998).* Won in 2013 by Anna Marie Bower and Emily Elizabeth Wirzba.

**Physics**

*Senior Physics Award (2005).* Based upon academic achievement, enthusiasm for learning physics and positive contributions to the physics program by their scholarly example and service, the Senior Physics Award is given annually to the best all around senior physics major. The recipient is selected by the Physics faculty, in conjunction with the donor, Dr. Paige Ouzts. Won in 2013 by David Cason Hanor.

**Political Science**

*S. Sidney Ulmer Political Science Medal (1955).* Founded by S. S. Ulmer and awarded to an outstanding student in political science. No student is eligible a second time. Won in 2013 by Benjamin Robert Saul.

*Henry P. Jones Political Science Medal (1986).* Awarded to an outstanding political science major in memory of Henry P. Jones. Won in 2013 by Corey Nathaniel Allen and Thomas Tyler Hydrick.

*Political Science Faculty Award (1997).* Won in 2013 by Amanda Marie Michalski, Raul Gabriel Rodriguez, and John Stephen Tagert.

*Political Science Chair’s Award (2003).* Award given to a senior major in recognition of superb academic achievement and distinguished service to the department. Won in 2013 by Emily Elizabeth Wirzba.

**Poverty Studies**

*Award for Excellence in Poverty Studies (2011).* Won in 2013 by Alanna Beth Gillis, Benjamin Robert Saul, and Emily Elizabeth Wirzba.

**Pre-Medical**

*Robert Emmett Allen Premedical Prize (1927).* Established by Kat Macy Ladd. Awarded to a senior judged outstanding in character and accomplishment in premedical education. Won in 2013 by Laura Elizabeth Graham.
Alpha Epsilon Delta Scholarship Award (1982). Presented annually to a premedical student on the bases of scholarship, financial need and contribution to Alpha Epsilon Delta, the honorary pre-medical fraternity. Won in 2013 by Ahmad Rami Dbouk and Rachel Anne Donaldson.

Psychology

Allport Scholar in Psychology (1968). Given by Robert J. Maxwell, Jr., to the senior psychology major best representing the integration of psychology and other disciplines. Won in 2013 by Sarah Rebecca Prickett and James Alexander Scott.

Brewer Scholar in Psychology. Won in 2013 by Kirsten Alyssa Scheil.


Religion

Baggott Ministerial Award (1970). Endowed by the Rev. and Mrs. James L. Baggott. Annual award in cash or books and medallion to the outstanding graduating ministerial student, based on Christian dedication, leadership, academic record and promise of outstanding service as minister and preacher. Won in 2013 by Jacob Clay Waldrip.

Baggott Excellence Award (1978). Endowed by the Rev. and Mrs. James L. Baggott. Annual awards of a medallion and cash to a senior man and woman on the basis of academic achievement and Christian character and for being an outstanding volunteer in church-related vocations. Won in 2013 by John Aymen Awadalla and Margaret Drew Bongiovanni.

Scholarly Achievement Award in Religion (1970). Won in 2013 by Catherine Anne Culbertson and Mattson Taylor Smith.

David Anthony Smith Award in Religion (2001). Won in 2013 by Christine Elizabeth Gwinn.

Sociology


Undergraduate Evening Studies

Frances Selby “Gig” Meredith Undergraduate Evening Studies Outstanding Student Award (1999). Won in 2013 by Antonio Rivera.

Women’s, Gender, and Sexuality Studies

Award for Excellence in Women’s, Gender, and Sexuality Studies (2001). Won in 2013 by Taylor Nicole Davidson.
Enrollment Summary

**Summer 2012**

<table>
<thead>
<tr>
<th>Enrollment Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td>276</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>258</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>534</td>
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**Fall 2012**

<table>
<thead>
<tr>
<th>Enrollment Program</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Day Program</td>
<td>2,662</td>
</tr>
<tr>
<td>Undergraduate Evening Program</td>
<td>115</td>
</tr>
<tr>
<td>Graduate Studies</td>
<td>159</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,936</td>
</tr>
</tbody>
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**Serving as Interim President - returns to board service upon completion of tenure

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Margaret E. Ulmer '56, Greenville, South Carolina
Benjamin J. Vinson '99, Atlanta, Georgia
Ronald V. Wade '66, Charlotte, North Carolina
David B. Wall '73, High Point, North Carolina
Franklin Bogue Wallin, Simpsonville, South Carolina
Charles Watson '00, Charlotte, North Carolina
James Bailey Watts '57, Camden, South Carolina
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Lisa R. Wheeler '82, Boca Raton, Florida
Brince Wilford '90, Nashville, Tennessee
Daniel F. Williamson, Greer, South Carolina
Bradford W. Wyche, Greenville, South Carolina
Melvin K. Younts '50, Fountain Inn, South Carolina
Richard D. Yovanovich '83, Naples, Florida

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O. Vernon Burton '69, Ninety Six, South Carolina
Charles Hardy '89, Asheville, North Carolina
Thomas A. Marshall '77, Atlanta, Georgia
George Short '54, Greenville, South Carolina
E. Leon Smith '61, Kernersville, North Carolina

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Bill Burtless '84, Greenville, South Carolina
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Greg Haselden '94, Simpsonville, South Carolina
Ken Sargent '62, Greer, South Carolina
David Tribble '76, Savannah, Georgia
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Vaughn CroweTipton (2003), Ph.D., Associate Vice President for Spiritual Life and University Chaplain
Michael D. Gatchell (2006), M.B.A., Vice President for Development
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Michael Bradley Pochard, (2008), M.B.A., Associate Vice President for Admission
Forrest M. Stuart, (2008), M.A., Associate Vice President for Financial Aid
Ernest Boyd Yarbrough (1999), Ed.D., Special Assistant to the President for Strategic Initiatives
Brad E. Barron (2002), M.A., Associate Dean and University Registrar
Thomas Bradley Bechtold (2001), M.S., Ed.D., Director of Continuing Education
Paula Susan Gabbert (1996), M.S., Ph.D., Associate Academic Dean
Kailash Khandke (1995), M.A., Ph.D., Assistant Academic Dean for Study Away and International Education
Marianne Momcilovich Pierce (1997), M.A., Ph.D., Senior Associate Academic Dean
Lesley Ann Quast (1976), M.Ed., Ed.D., Assistant Academic Dean for Advising
Troy M. Terry (2005), Ph.D., Director of Graduate Studies

Faculty

Kenneth Clyde Abernethy (1983), Herman N. Hipp Professor of Computer Science, B.S., University of North Carolina, Charlotte; M.A., Ph.D., Duke University.
Donald Paul Aiesi (1965-67, 1970), Professor of Political Science, B.A., Stetson University; J.D., Duke University; M.A., Emory University; Ph.D., University of Florida.
Christy Allen (2013), Assistant Librarian, A.A. Coastal Carolina Community College; B.A., East Carolina University; M.L.S., University of North Carolina.
Gilbert Bruce Allen (1977), Bennette E. Geer Professor of Literature, B.A., M.F.A., Ph.D., Cornell University.
James Thomas Allen, Jr. (1987), Professor of Computer Science, B.A., M.A., Memphis State University; M.S., University of South Carolina; Ph.D., University of Georgia.
Mark Amenguial (2013), Instructor in Modern Languages and Literatures, B.A., Universitat de les Illes Balears, Spain; M.A., Pennsylvania State University; Ph.D. Candidate, University of Texas.
Charles Brannon Andersen (1994), Professor of Earth and Environmental Sciences, B.S., Texas A&M University; M.S., Miami University; Ph.D., Syracuse University.
Erik Albert Anderson (2001), Associate Professor of Philosophy, B.A., University of Puget Sound; M.A., Ph.D., University of Connecticut.
Henry L. Anderson CPT (2006), Associate Professor of Military Science, M.S., Central Michigan University.
Robert S. Arden (2003), Lecturer in Economics, B.A. Allegheny College, Ph.D., Vanderbilt University.
John Stevenson Armstrong (2002), Associate Professor of Communication Studies, B.A., Pomona College; M.A., University of California; Ph.D., University of Utah.
Maegan M. Azar (2010), Assistant Professor of Theatre Arts, B.S., East Tennessee State University; M.F.A., University of Alabama.
Eiho Baba (2008), Assistant Professor of Philosophy and Asian Studies, B.A., International Christian University; M.A., Ph.D., University of Hawai’i at Manoa.
Laura Ellen Baker (2001), Assistant Librarian, B.A., Syracuse University; M.S.L.S., Clark Atlanta University.
William Mebane Baker (1994), Professor of Physics, B.S., Ph.D., North Carolina State University; M.S., University of North Carolina, Greensboro.
Janis Marie Bandelin (1996), Librarian, B.A., University of California, Davis; M.L.S., Ph.D., Texas Woman’s University.
John J. Banisaukas III (2003), Health Professions Advisor, B.S., M.S., Furman University; Ph.D., University of Florida.
John Patrick Thaddeus Barrington (1996), Professor of History, B.A., University of Oxford; M.A., Ph.D., College of William & Mary.
Linda Boone Bartlett (1991), Professor of Modern Languages and Literatures, B.A., Wake Forest University; M.A., Ph.D., University of Virginia.
John Dean Batson (1982), Professor of Psychology, B.A., Furman University; M.A., Ph.D., University of Virginia.


Theodore Lloyd Benson (1990), Walter Kenneth Mattison Professor of History, A.A., Empire State College; B.A., M.A., Ph.D., University of Virginia.

Marianne Bessy (2008), Visiting Assistant Professor of Modern Languages and Literatures, B.A., M.A., Université Rennes II Haute Bretagne, M.A., University of Limerick; Ph.D., Louisiana State University.

Betsy A. Beymer-Farris (2011), Assistant Professor of Earth and Environmental Sciences, B.A., Wittenberg University; M.A., Miami University; Ph.D., University of Illinois.

Karni Pal Bhati (2001), Associate Professor of English and Asian Studies, B.A., University of Jodhpur; M.A., M.Phil., Maharaja Sayajirao University of Baroda; M.A., M.F.A., Ph.D., University of Notre Dame.

Bryan Donald Bibb (2000), Associate Professor of Religion, B.A., Furman University; M.Div., Ph.D., Princeton Theological Seminary.

Temi Bidjerano (2007), Associate Professor of Education, B.A., M.A., Sofia University, Bulgaria; M.S., Ph.D., State University of New York at Albany.

Christopher William Blackwell (1996), Professor of Classics, B.A., Marlboro College; Ph.D., Duke University.

William Dennis Blaker (1990), Professor of Biology, A.B., Washington University; Ph.D., University of Missouri.

Kerstin K. Blomquist (2011), Assistant Professor of Psychology, B.A., Wellesley College; M.A., Ph.D., Vanderbilt University.

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Emeriti

David Emory Shi (1994-2010), President Emeritus, B.A., Furman University; M.A., Ph.D., University of Virginia.

Charles Lang Alford III (1971-2003), James C. Self Professor of Business Administration Emeritus, B.A., Wofford College; Ph.D., University of Alabama.

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Albert Lemuel Blackwell (1971-2004), Reuben B. Pitts Professor of Religion Emeritus, B.S., Massachusetts Institute of Technology; B.D., Harvard Divinity School; Ph.D., Harvard University.

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John Martin Block (1968-2005), Professor of History Emeritus, B.A. Furman University; M.A., Ph.D., University of Wisconsin.

Daniel Boda (1967-94), Professor of Music Emeritus, B.M., Florida State University; M.M., Eastman School of Music; Ph.D., Florida State University.

Thomas Oliver Buford (1969-2006), Louis G. Forgione Professor of Philosophy Emeritus, B.A., North Texas State University; B.D., Southwestern Baptist Theological Seminary; Ph.D., Boston University.

Charles Maurice Cherry (1969-71, 1974-2013), Carey Shepard Cranford Endowed Professor of Modern Languages and Literatures Emeritus, B.A., Furman University; M.A., University of South Carolina; Ph.D., Northwestern University.

John Glennwood Clayton (1972-2004), Librarian Emeritus, B.A., Wake Forest University; M.L., University of South Carolina; B.D., Ph.D., Southern Baptist Theological Seminary.

Carl Thomas Cloer, Jr. (1974-2004), Professor of Education Emeritus, B.S.Ed., Cumberland College; M.Ed., Clemson University; Ph.D., University of South Carolina.

James Dan Cover (1971-2002), Professor of Sociology Emeritus, B.A., California State University at Long Beach; M.A., California State University at Los Angeles; Ph.D., University of Cincinnati.

John Henry Crabtree, Jr. (1957-93), Professor of English Emeritus, B.A., M.A., Ph.D., University of North Carolina; D.Hum., Furman University.


Dixon Courson Cunningham (1976-2002), Professor of Economics and Business Administration Emeritus, B.A., Erskine College; M.B.A., University of South Carolina; D.B.A., University of Virginia.

Douglas Matthew Cummins (1997-2010), Professor of Theatre Arts Emeritus, B.M.Ed., M.F.A., M.Div., Texas Christian University; Ph.D., Texas Tech University.

Frederick Dale Current (1979-99), Associate Professor of Economics and Business Administration Emeritus, B.A., Franklin and Marshall College; M.B.A., Michigan State University.

James Creighton Edwards (1970-2011), Professor of Philosophy Emeritus, B.A., Furman University; M.A., University of Chicago; Ph.D., University of North Carolina.

Philip Lovin Elliott (1967-99), Professor of English Emeritus, B.A., Furman University; M.A., University of North Carolina; Ph.D., University of Georgia.

Gilbert Wayne Fairbanks (1964-2000), Professor of Biology Emeritus, B.S., Trinity College; M.A., Wesleyan University; Ph.D., University of South Carolina.

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Thomas Earl Flowers (1959-89), Professor of Art Emeritus, B.A., Furman University; M.F.A., University of Iowa.

Trudy Hines Fuller (1983-2013), Professor of Music Emerita, B.A., M.A., University of North Colorado; D.M.A., University of Arizona.

Francis Courtland Raoul Gilmour (1981-96), Associate Professor of Drama Emeritus, B.A., Ed.M., Harvard University; Ph.D., Loyola University; M.F.A., Ohio University.

Sallie Jeanette Grant (1971-93), Professor of Education Emerita, B.S., M.S., Florida State University; Ph.D., University of Illinois.

Michael Erwin Hammett (1962-2000), Professor of Mathematics Emeritus, B.A., Furman University; M.S., Ph.D., Auburn University.


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Eugene Milton Johnson (1966-93), Professor of Sociology Emeritus, B.A., Louisiana State University; B.D., Southern Baptist Theological Seminary; M.A., Ph.D., Louisiana State University.

James William Johnson (1957-94), Associate Professor of Economics and Business Administration Emeritus, B.S., University of Tampa; M.B.A., Emory University.

Edward Brodus Jones (1956-96), Gordon Poteat Professor of Chinese Studies and Professor of History Emeritus, B.A., Furman University; M.A., University of North Carolina; Ph.D., Duke University.

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Robert Withers Kelly (1964-88), Professor of Biology Emeritus, A.B., Centre College; M.S., University of Oregon; Ph.D., University of Missouri.

Joe Madison King (1953-88), Professor of Religion Emeritus, B.A., Louisiana Technical University; B.D., Southern Baptist Theological Seminary; Th.M., Th.D., New Orleans Baptist Theological Seminary.

Myron Low Kocher (1959-92), Professor of Modern Languages Emeritus, B.A., Wake Forest University; M.A., Middlebury College; Ph.D., University of North Carolina.


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Thomas Ray Nanney (1960-2001), Herman N. Hipp Professor of Computer Science Emeritus, B.S., University of North Carolina; Ph.D., University of South Carolina.

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Alice Ruth Reid (1956-85), Professor of Health and Physical Education Emerita, A.B., Valdosta State College; M.A., Columbia University; Ph.D., State University of Iowa.

William Elford Rogers (1962-98), Professor of Chinese Studies and Professor of History Emeritus, B.A., College of Idaho; M.A., Ph.D., University of North Carolina.

Kenneth Aaron Sargent (1968-2007), Professor of Earth and Environmental Sciences Emeritus, B.A., Furman University; M.S., Ph.D., University of Oklahoma.


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John Alan Snyder (1971-2009), Professor of Biology Emeritus, B.A., Western Reserve University; M.A., Ph.D., University of Michigan.

Albert Bingham Somers (1973-98), Professor of Education Emeritus, A.B., M.Ed., University of North Carolina; Ph.D., Florida State University.

Richard Olof Sorensen (1974-2003), Professor of Art Emeritus, B.F.A., Minneapolis School of Art; M.F.A., Pratt Institute; Ph.D., Ohio University.

Richard Alexander Stanford (1968-2008), David C. Garrett, Jr., Professor of Economics Emeritus, B.A., Furman University; Ph.D., University of Georgia.

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Larry Stanley Trzupek (1974-2005), Professor of Chemistry Emeritus, B.S., Loyola University; Ph.D., Massachusetts Institute of Technology.

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Herbert Burnette Tyler (1986-98), Professor of Education Emeritus, B.A., Furman University; M.Ed., Ph.D., University of South Carolina.

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Philip Connor Winstead (1972-2001), Professor of Education Emeritus, B.A., Davidson College; M.A., Appalachian State University; Ed.D., Duke University.

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John D. Barker (1999), Ph.D., Director of Career Services

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Timothy W. Bishop (2012), B.A., Director of Museum Development, Upcountry History Museum

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Kylee M. Perez (2012), M.A., Web Content Developer
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Laura Brown Simmons (1984), B.A., Regional Admission Representative
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William J. Pierce (1983), Ed.D., Faculty Athletics Representative
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Andrew W. Athens (2012), B.A., Assistant Coach, Men’s Lacrosse
N. Elaine Baker (1985), M.A., Associate Athletics Director and Director of Sports Medicine
Daniel S. Brinkman (1991), M.Ed., Associate Athletics Director, Compliance and Academics
Jermaine Antwain Brown (2010), B.S., Director of Women’s Basketball Operations
Jonathan Mark Brown (2009), M.B.A., Assistant Director, Paladin Club
Andrew S. Burr (2001), B.A., Head Women’s Soccer Coach
Benjamin Kyle Burress (2012), Assistant Director, Football Operations
Jacquelyn Smith Carson (2010), B.S., Head Women’s Basketball Coach
G. Jordan Caskey (2002), B.A., Assistant Sports Information Director
Adam M. Chinery (2012), Assistant Athletic Trainer
Katie Chisholm (2011), A.S., Physical Therapy Assistant
Craig A. Clark (2009), M.Ed., Head Athletic Trainer
Christopher E. Colvin (2000), M.S., Associate Athletics Director
Dwight Wayne Covington (2006), B.S., Athletics Ticket Sales Coordinator
Amy D. Cox (2008), M.S., Physical Therapist
F. Elizabeth Davis (2005), M.S., Physical Therapist
Sandra M. Day (2012), B.S., Assistant Softball Coach
Geoffrey del Forn (2012), B.A., Assistant Men’s Soccer Coach
Todd Duke (1997), M.A., Assistant Athletics Director
Virginia Cheryl Edge (2011), A.A, Physical Therapy Assistant
Anthony Rudolph Esquivel (2012), B.A., Assistant Men’s Soccer Coach
Patrick K. Evatt (2006), A.S., Physical Therapist Assistant
Bruce A. Fowler (2011), M.A., Head Football Coach
Rita Gary (2012), B.A., Assistant Coach, Men’s and Women’s Cross Country and Track and Field
Robert M. Gary (2012), B.A., Head Coach, Men’s and Women’s Cross Country and Track and Field
Antonio Goss (2011), B.S., Assistant Football Coach
Dorian Duane Green (2013), B.S., Assistant Men’s Basketball Coach
Krista R. Gruhn (2009), M.S., Assistant Athletic Trainer
Brian D. Harper (2012), B.A., Assistant Women’s Soccer Coach
Kelley Richardson Hester (2012), B.A., Head Women’s Golf Coach
Garry Horton (2010), M.A., Assistant Women’s Basketball Coach
Julia B. Huddleston (2010), M.S., Assistant Women’s Basketball Coach
W. Jeffrey Hull (2012), B.S., Assistant Women’s Golf Coach
R. Kyle Jamieson (2012), B.S.Ed., Head Softball Coach
Christine Johnston (2011), B.A., Assistant Women’s Tennis Coach
Kelly Lee Jones (2011), Head Men’s Tennis Coach
James Kiser (2011) M.B.A., Assistant Football Coach
Courtney Marie Leagans (2011), M.A., Assistant Volleyball Coach
Jimmy T. Lindsey (2012), B.S., Assistant Football Coach
W. Paul Lollis (2010), B.A., Video Coordinator
Norval McKenzie (2011), M.Ed., Assistant Football Coach
Georgianna McManin (1985), Ticket Manager
Richard Francis Meade (2012), M.S., Head Men’s Lacrosse Coach
Niko Medved (2013), M.Ed., Head Men’s Basketball Coach
Timothy Mitchell (2009), B.A., Athletic Equipment Manager
Mark Moehring (2011), M.Ed., Assistant Football Coach
Casey Moore (2012), M.A., Assistant Athletic Trainer
Eugene P. Mullin (1983), M.A., Assistant Athletics Director for Special Projects
Christopher M. Neal (2012), M.A., Assistant Coach, Men’s and Women’s Cross Country and Track and Field
Heather S. Newman (2012), Assistant Athletic Trainer
Christopher A. Pare (2012), M.A., Assistant Athletics Trainer
Julie Prince Pare (2012), Assistant Sports Information Director
Kenneth R. Pettus (2001), M.A., Associate Athletics Director
Michael Ranson (2012), M.Ed., Assistant Baseball Coach
F. Hunter Reid (1986), B.S., Associate Athletics Director, Sports Information
Robert McIntire Richey (2011), B.S., Assistant Men’s Basketball Coach
Joanna Lynn Rish (2011), D.P.T., Physical Therapist
Daniel Earl Rochester (2013) B.S., Assistant Strength and Conditioning Coach
Todd E. Satterfield (1996), B.B.A., Head Men’s Golf Coach
LaCheryl Smith (2010), M.Ed., Assistant Women’s Basketball Coach
Ronald B. Smith (1993), M.A., Head Baseball Coach
Scott J. Smouse (2011), M.S., Assistant Football Coach
Jordan James Sorrells (2011), B.A., Director, Football Operations
Timothy Lee Sorrells (1986), M.A., Assistant Football Coach
Deborah Leigh Southern (1985), M.B.A., Head Women’s Tennis Coach
Richard Alan Spradling (2011), Assistant Football Coach
April Dianne Tooker (2008), B.A., Assistant Women’s Soccer Coach
Dorman Duane Vaughn III (2011), B.S., Assistant Football Coach
Sam Waniewski (2013), M.S., Director of Men’s Basketball Operations
Jeffrey Whitfield (2007), B.S., Assistant Baseball Coach
Jonathan Windham (2011), M.S., Assistant Football Coach
Rachel Shuck Whitten (2012), B.A., Head Women’s Lacrosse Coach
Michelle T. Young (2000), B.A., Head Volleyball Coach

University Medical Services

Paul V. Catalana (2000), M.D., University Physician and Medical Director
Jill D. Golden (2000), M.D., University Physician
Kerry Sease (2004), M.D., University Physician
Russ Kolarik (2008) MD University Physician
Sandra P. Adams (1988), R.N., Registered Nurse
Regina F. Fowler (1988), L.P.N., Licensed Practical Nurse
Mary B. Haseelden (2000), R.N.C., M.S.N., Director of Nursing
Mary Ann McCain (1997), L.P.N., Licensed Practical Nurse
Judith F. Thompson (1981), R.N., Registered Nurse
**Correspondence Directory**

**Furman University, Greenville, South Carolina 29613**

<table>
<thead>
<tr>
<th>Department</th>
<th>Contact Person</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Admission, Undergraduate</td>
<td>Associate Vice President for Admission</td>
<td>864-294-2000</td>
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<td>Admission, Graduate</td>
<td>Director of Graduate Studies</td>
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<td>Alumni Interests</td>
<td>Director of Alumni Association</td>
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<td>Business and Financial Matters</td>
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<td>Counseling</td>
<td>Director of Counseling Center</td>
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<td>Educational Program</td>
<td>Vice President for Academic Affairs and Dean</td>
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<td>Employment of Seniors and Alumni</td>
<td>Director of Career Services</td>
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<td>Graduate Courses</td>
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<td>Associate Vice President for Financial Aid</td>
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<td>Vice President for Student Life</td>
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<td>Summer Courses</td>
<td>Associate Dean and University Registrar</td>
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<td>Transcripts and Academic Records</td>
<td>Associate Dean and University Registrar</td>
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Furman is five miles north of Greenville, South Carolina, on U.S. Highway 25. Greenville is on U.S. Interstate 85 and is readily served by train, bus and air (Greenville-Spartanburg International Airport).

Additional information is available via e-mail: admission@furman.edu or on the web at www.furman.edu.
Calendar

**Fall 2013**

- New resident students arrive: Friday, August 23
- Residence halls open for returning students: Sunday, August 25
- Classes begin: Tuesday, August 27
- Labor Day: Monday, September 2
- Course Adjustment Processing concludes: Thursday, September 5
- Family Weekend: Friday-Sunday, October 4-6
- Fall Break: Saturday-Tuesday, October 12-15
- Midterm: Wednesday, October 16
- Homecoming: Friday-Sunday, November 8-10
- Thanksgiving holidays: Wednesday-Sunday, November 27-December 1
- Classes End: Tuesday, December 10
- Study Days: Wednesday & Saturday, December 11 & 14
- Examinations: Thursday-Friday, Monday-Wednesday, December 12, 13, 16-18
- Campus housing closes at 10 a.m.: Thursday, December 19

**Spring 2014**

- Residence halls open: Saturday, January 11
- Classes begin: Monday, January 13
- Martin Luther King, Jr., holiday: Monday, January 20
- Course Adjustment Processing concludes: Wednesday, January 22
- Mid-Term: Monday, March 3
- Spring Break: Saturday-Sunday, March 8-16
- Easter holidays: Friday-Monday, April 18-21
- Classes End: Tuesday, April 29
- Study Days: Wednesday & Saturday, April 30 & May 3
- Examinations: Thursday-Friday, Monday-Wednesday, May 1, 2, & 5-7
- Campus housing closes for non-graduates at 5 p.m.: Thursday, May 8
- Commencement: Saturday, May 10
- Campus housing closes for graduates: Sunday, May 11

**May Experience 2014**

- Campus housing opens: Tuesday, May 13
- Classes begin: Wednesday, May 14
- Classes End: Wednesday, June 4
- Campus housing closes at 5 p.m.: Thursday, June 5