# Howard College of Arts and Sciences

## Administration

David W. Chapman, Dean
Rosemary M. Fisk, Associate Dean
George E. Keller III, Assistant Dean

### History

John Howard, for whom Howard College was named, was an eighteenth century English social reformer who frequently risked his own life to better the wretched condition of prisoners in that era. He was widely revered as a model of Christian compassion when Howard College was founded in 1841. When the college became a university in 1965, the Howard College of Arts and Sciences retained both the name and the legacy of this great humanitarian.

### Mission

Most Samford students will spend the majority of their first two years taking courses in the College of Arts and Sciences. This liberal education provides the foundation for more advanced study in particular disciplines or majors. Many students will continue to major in one of the traditional liberal arts disciplines, including the visual arts, the humanities, the social sciences, or the natural sciences. With seventeen departments and over 30 different majors, Howard College is the largest of Samford's eight schools. Although liberal arts majors are not necessarily tied to a specific career path, they all provide an ability to think critically and express ideas cogently—skills that are valued in all professions.

In addition to career-related objectives, a liberal education engages students in the larger questions of life. Courses in the arts and humanities acquaint students with the religious, social, linguistic, and aesthetic dimensions of world cultures. Courses in the social sciences provide a means for exploring the varieties of human experience and patterns of social behavior. Courses in mathematics and sciences provide insight into the natural world and quantitative methods. Moreover, such a course of study helps students develop a closely examined core of personal beliefs and a strong code of values that lead to an informed and constructive public life. For more than a century and a half, the Howard College of Arts and Sciences has embodied these high ideals within a Christian environment in which dedicated teachers and students can work closely together to seek each individual's highest fulfillment.

### Degrees Offered

The College offers programs that meet the requirements for the bachelor of arts and bachelor of science degrees. A master's degree is offered in environmental management (see Department of Biology).

### Teacher Certification

Students who want to receive teacher certification while earning a bachelor of arts degree or bachelor of science degree should consult with the Certification Officer and Advisor in the Orlean Bullard Beeson School of Education and Professional Studies (OBB 322).

### Accreditation

All degrees in the Howard College of Arts and Sciences are fully accredited by the Southern Association of Colleges and Schools.

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# University Core and General Education Curriculum Requirements

## Core Faculty

Nancy C. Biggio, Assistant Professor
R. Kenneth Kirby, Assistant Professor
Kathy C. Parnell, Instructor
Lynette M. Sandley, Assistant Professor

All students in the Howard College of Arts and Sciences will complete the University Core Curriculum (22 credits). Additional courses in general education are also required to provide the foundation for the more specialized courses in the major. In some cases the particular course required to satisfy a general education requirement is specified by the major. Students should consult the section of the catalog that describes the major under consideration to learn about these special requirements.

**UCBP 101 Biblical Perspectives (4)**
Examination of historical context and religious teachings of Hebrew and Christian Scriptures. Cultivation of critical competencies necessary for the academic study of traditional texts. Course objectives include an understanding of the historical context in which the Bible took shape; appreciation of the development of religious thought within the biblical period; examination of how biblical teachings have been and are interpreted and applied; and study of the Bible, using a variety of modern critical methods.

**UCCA 101 Communication Arts I (4)**
Introductory course in communication, emphasizing guided practice in speaking, listening, reading, and writing. Students gain proficiency in the use of library resources and in foundational computing skills. Students must write a minimum of four essays that are revised through multiple drafts and carefully edited before submission. They also must make at least three oral presentations during the course. Students must pass this course with a grade of C- or better to advance to UCCA 102.

**UCCA 102 Communication Arts II (4)**
Continuation of UCCA 101 with additional guided practice in speaking, listening, reading, and writing. Special emphasis placed on research-based writing and argumentation. Students must write a minimum of four essays that are revised through multiple drafts and carefully edited before submission. They also must make at least three oral presentations during the course. Prereq: Grade of C- or better in UCCA 101. Students must pass this course with a grade of C- or better.

**UCCP 101 Cultural Perspectives I (4)**
First in a two-semester sequence that examines the Western intellectual tradition within a global context. Through interdisciplinary study, students increase their awareness of the cultural, historical, literary, philosophical, and religious influences upon the development of civilizations.

**UCCP 102 Cultural Perspectives II (4)**
Second in a two-semester sequence that examines the Western intellectual tradition within a global context. Through interdisciplinary study, students increase their awareness of the cultural, historical, literary, philosophical, and religious influences upon the development of civilizations.

**UCFH 120 Concepts of Fitness and Health (2)**
Physical fitness course, with emphasis on exercises that develop cardiorespiratory, muscular, and flexibility fitness. All aspects of fitness, such as principles of aerobic fitness, nutrition, flexibility, strength training, common fitness injuries, and weight control and body composition are discussed and applied.

NOTES: 1) Core curriculum requirements cannot be met through transient enrollment; 2) Placement into UCCA 102, bypassing the requirement to complete UCCA 101, does not exempt students from the minimum number of hours required for their chosen degree program (usually 128). These students may need to complete an additional four hours of a General Elective.

| General Education Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Natural & Computational Sciences (select two courses)** | | | **8** |
| BIOL 105 | Principles of Biology | 4 | |
| BIOL 107 | Contemporary Biology | 4 | |
| BIOL 110 | Human Biology | 4 | |
| BIOL 111 | Animal Biology | 4 | |
| BIOL 112 | Plant Biology | 4 | |
| CHEM 108/109 | General, Organic, & Biological Chem w/Lab | 4 | |
| CHEM 205/206 | Foundations of Chemistry | 4 | |
| COSC 107 | Introduction to Computer Science | 4 | |
| GEOG 214 | Physical Geography | 4 | |
| IDSC 201 | Scientific Methods* | 4 | |
| PHYS 100 | Physics for Society | 4 | |
| PHYS 101 | General Physics I | 4 | |
| PHYS 102 | General Physics II | 4 | |
| PHYS 150 | Introduction to Astronomy | 4 | |
| PHYS 203 | Physics I | 5 | |
| PHYS 204 | Physics II | 5 | |
| PHYS 206 | Sound and Music | 4 | |
| **Social Science (select one course outside your major)** | | | **4** |
| COMS 205 | Intercultural Communication | 4 | |
| ECON 201 | Principles of Macroeconomics | 4 | |
| GEOG 101 | World Regional Geography | 4 | |
| JMC 200 | Mass Communication & Society | 4 | |
| LOND 360 | British Heritage and Culture | 4 | |
| POLS 200 | Introduction to Political Science | 4 | |
| PSYC 101 | General Psychology | 4 | |
| SOCI 100 | Introduction to Sociology | 4 | |
| SOCI 101 | Introduction to Cultural Anthropology | 4 | |
| **Mathematics (select one course)** | | | **4** |
| MATH 110 | Contemporary Mathematics | 4 | |
| MATH 150 | Precalculus | 4 | |
| MATH 210 | Elementary Statistics | 4 | |
| MATH 240 | Calculus I | 4 | |
| Any other math course above 240 for students who demonstrate competency at the Calculus I level. | | 4 | |
| **Languages** For students without language proficiency, the normal sequence is:** | | | **4-16** |
| FREN, GER, GREK, LATN, or SPAN 101 | | 4 | |
| FREN, GER, GREK, LATN, or SPAN 102 | | 4 | |
| FREN, GER, GREK, LATN, or SPAN 201 | | 4 | |
| FREN, GER, GREK, LATN, or SPAN 202 | | 4 | |
| **Fine Arts (select two courses)‡** | | | **4** |
| ART 200 | Art Appreciation† | 2 | |
| MUSC 200 | Music Appreciation†† | 2 | |
| THEA 200 | Theatre Appreciation††† | 2 | |
| **Humanities (select one course outside your major)** | | | **4** |
| CLAS 200 | Rediscovery of the Classical World | 4 | |
| ENGL 205 | Fiction and Film | 4 | |
| HIST 200 | The West in Global Perspective | 4 | |
| LAST 201 | Latin American Studies | 4 | |
| LOND 360 | British Heritage and Culture | 4 | |
| PHIL 241 | Introduction to Philosophy | 4 | |
| RELG 200 | Christian Ethics | 4 | |
| RELG 201 | Introduction to World Religions | 4 | |
| RELG 221 | Christian Theology | 4 | |
| **Physical Activity***** | | | **2** |
| | **Total Required Credits** | | **30-42** |

*****IDSC 201 Scientific Methods (4) Scientific approach to understanding the physical universe through an investigation of representative topics in physics, chemistry, and biology, paying particular attention to the sources of scientific information both for scientists and society. Interdisciplinary course taught by faculty in biology, chemistry, and physics. Meets general education requirement for natural and computational sciences. LEC 4. Prereq: Grade of C- or better in UCCA 102.

******Students with a higher level of proficiency may begin with the 201-202 sequence. An accelerated one-semester course is available in French and Spanish (FREN 203, SPAN 203). Arabic, Chinese, Hindi, Italian, Japanese, Portuguese, Russian, Swahili, and Thai are also available through the Critical Languages Program. For further details see the World Languages and Cultures section.

*******Select two different one-credit, fitness-based activity courses. If PHED 138 Water Safety Instructor Course (2) is passed, the successful completion of UCFH 120 will fulfill the student's physical activity requirement.

NOTE: Study Abroad courses in London and other international settings may meet the general education requirements for humanities, social science, and natural and computational sciences, subject to prior approval by the department chair of the course equivalent.

‡LOND 202 satisfies the Fine Arts requirement.
†ART 381W, 382W, 383W, or LOND 201 may be substituted for ART 200.
††LOND 201 may be substituted for MUSC 200.
†††THEA 331W or LOND 200 may be substituted for THEA 200.

# Biological and Environmental Sciences

## Faculty

Ronald N. Hunsinger, Chair, Professor
Lawrence J. Davenport, Professor
Elizabeth G. Dobbins, Associate Professor
George E. Keller III, Associate Professor
Rita Malia Fincher, Assistant Professor
Jason L. Heaton, Assistant Professor
Marione E. Nance, Assistant Professor

## Undergraduate Programs and Requirements

### Majors

Biology
Environmental Science
Marine Science

### Minors

Biology
Marine Science

### Interdisciplinary Concentration

Environmental Science/Geographic Information Systems (EGIS)

The Department of Biological and Environmental Sciences offers majors in biology, environmental science, and marine science. An interdisciplinary concentration is offered in environmental science/geographic information systems (EGIS).

All majors and the interdisciplinary concentration lead to a bachelor of science degree. Preparation is provided for professional programs in the allied health sciences. Minors are offered in biology and marine science.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. ECON 201 (Principles of Macroeconomics) is the general education social science requirement for the EGIS interdisciplinary concentration.

### Biology Minor

| Biology Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Biology Core*** | | **12** |
| BIOL 105 Principles of Biology | 4 | |
| BIOL 111 Animal Biology | 4 | |
| BIOL 112 Plant Biology | 4 | |
| **Biology Electives**<br>(Select two upper-level courses, excluding BIOL 438W, 439, 440, and 441) | | **8** |
| **Total Required Credits** | | **20** |

*BIOL 203 and 204 may substitute for BIOL 105, 111, and 112; however, 20 credits are needed to satisfy the minor in biology.

### Marine Science Minor

| Marine Science Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Marine Science*** | | **20** |
| MARS 403 Marine Invertebrate Zoology | 4 | |
| MARS 411 Marine Vertebrate Zoology | 4 | |
| MARS 412 Marine Botany | 4 | |
| MARS 436 Marine Ecology | 4 | |
| MARS or BIOL upper-level course | 4 | |
| **Total Required Credits** | | **20** |

*BIOL 105, 111, and 112, or BIOL 203 and 204 are prerequisites for the marine science courses.

### Biology Major

Students majoring in biology are offered the flexibility to design their own program. Students may emphasize the science of the environment, plant and animal diversity, animal physiology, microbiology, or cell-molecular biology. This flexibility allows students to prepare for a variety of graduate and professional programs.

| Biology Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **38-56** |
| **Natural and Computational Sciences:** | | **16-22** |
| **Chemistry** (select at least three combinations of lec/lab*) | **12** | |
| CHEM 205 Foundations of Chemistry | 3 | |
| CHEM 206 Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 Organic Reactions & Mechanisms | 3 | |
| CHEM 316 Organic Reactions & Mechanisms Lab | 1 | |
| CHEM 325 Quantitative Analysis | 3 | |
| CHEM 326 Quantitative Analysis Laboratory | 1 | |
| CHEM 350 Biochemistry I | 4 | |
| **Physics** (choose one option) | **4-10** | |
| PHYS 100 Physics for Society (4, min. req.) *or*<br>PHYS 101 *or* 101-102 General Physics I and II (4-8) *or*<br>PHYS 203 *or* 203-204 Physics I and II (5-10) | | |
| **Social Sciences** | | **4** |
| **Mathematics** | | **4** |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Biology Major:** | | **36** |
| **Biology Core**** | | **20** |
| BIOL 203 Foundations of Biology I | 4 | |
| BIOL 204 Foundations of Biology II | 4 | |
| BIOL 326 Environmental Science | 4 | |
| BIOL 333 Genetics | 4 | |
| BIOL 438W Biology Seminar (enroll during senior yr) | 4 | |
| **Biology Electives***** | | **16** |
| **General Electives** | | **14-32** |
| **Total Required Credits** | | **128** |

* Selection should be made with the help of an academic advisor.
** BIOL 105, 111, and 112 may substitute for BIOL 203 and 204.
*** The requirement excludes externships (BIOL 361) and independent research (BIOL 439, 440, and 441).

## Environmental Science Major

| Environmental Science Major Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **58-70** |
| **Natural and Computational Sciences:** | | **32** |
| **Chemistry** | **20** | |
| CHEM 205 Foundations of Chemistry | 3 | |
| CHEM 206 Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 Organic Reactions & Mechanisms | 3 | |
| CHEM 316 Organic Reactions & Mechanisms Lab | 1 | |
| CHEM 325 Quantitative Analysis | 3 | |
| CHEM 326 Quantitative Analysis Laboratory | 1 | |
| CHEM 340W Chemical Instrumentation* | 4 | |
| **Geography** | **4** | |
| GEOG 214 Physical Geography | 4 | |
| **Physics** | **8** | |
| PHYS 101 General Physics I | 4 | |
| PHYS 102 General Physics II | 4 | |
| **Social Sciences** | | **4** |
| **Mathematics** | | **8** |
| MATH 210 Elementary Statistics | 4 | |
| MATH 240 Calculus I | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Environmental Science Major:** | | **44** |
| BIOL 203 Foundations of Biology I | 4 | |
| BIOL 204 Foundations of Biology II | 4 | |
| BIOL 302 Mammalian Physiology | 4 | |
| BIOL 325 General Microbiology | 4 | |
| BIOL 326 Environmental Science | 4 | |
| BIOL 333 Genetics | 4 | |
| BIOL 403 Invertebrate Field Zoology | 4 | |
| BIOL 416 Vertebrate Field Zoology | 4 | |
| BIOL 422 Plant Taxonomy and Local Flora | 4 | |
| BIOL 438W Biology Seminar | 4 | |
| BIOL 436 Ecology | 4 | |
| **General Electives** | | **0-8** |
| **Total Required Credits** | | **132-136** |

*See the 2006-07 catalog for a course description for CHEM 340W.

## Marine Science Major

Students pursuing this program must complete a minimum of one semester or two five-week summer terms at the Dauphin Island Sea Lab located on Dauphin Island in Mobile Bay. The Sea Lab is operated by the Marine Environmental Science Consortium of which Samford is an active member. At least one year (preferably more) of biology is required before any upper-level course in marine science may be taken. Alternately, a student may complete the necessary marine biology courses to satisfy a minor in marine science.

| Marine Science Major Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **46-60** |
| **Natural and Computational Sciences:** | | **20-22** |
| **Chemistry** | **12** | |
| CHEM 205 Foundations of Chemistry | 3 | |
| CHEM 206 Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 Organic Reactions & Mechanisms | 3 | |
| CHEM 316 Organic Reactions & Mechanisms Lab | 1 | |
| **Physics** (choose one combination) | **8-10** | |
| PHYS 101-102 General Physics I and II (8) *or* PHYS 203-204 Physics I and II (10) | | |
| **Social Sciences** | | **4** |
| **Mathematics** | | **8** |
| MATH 210 Elementary Statistics | 4 | |
| MATH 240 Calculus I | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Marine Science Major:** | | **36** |
| **Biology** | | **20** |
| BIOL 203 Foundations of Biology I | 4 | |
| BIOL 204 Foundations of Biology II | 4 | |
| BIOL 333 Genetics | 4 | |
| BIOL 438W Seminar | 4 | |
| Biology Elective | 4 | |
| **Marine Science*** | | **16** |
| MARS 403 Marine Invertebrate Zoology | 4 | |
| MARS 411 Marine Vertebrate Zoology | 4 | |
| MARS 412 Marine Botany | 4 | |
| MARS 436 Marine Ecology | 4 | |
| **General Electives** | | **10-24** |
| **Total Required Credits** | | **128** |

*Substitutions of other marine science courses must be approved by program director.

## EGIS Interdisciplinary Concentration

The EGIS interdisciplinary concentration is offered jointly by the departments of biology and geography with use of the Rust International GIS Laboratory. Students uniquely combine the fields of environmental and field biology with the technical fields of remote sensing, computer mapping, and GIS. University core curriculum and general education requirements are the same as the geography major with one exception: ECON 201 is the social science requirement for EGIS.

| EGIS Interdisciplinary Concentration Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **42-54** |
| **Natural and Computational Sciences:** | | **16** |
| **Chemistry** | **12** | |
| CHEM 205 Foundations of Chemistry | 3 | |
| CHEM 206 Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 Organic Reactions & Mechanisms | 3 | |
| CHEM 316 Organic Reactions & Mechanisms Lab | 1 | |
| **Physics** | **4** | |
| PHYS 100 Physics for Society | 4 | |
| **Social Sciences** | | **4** |
| ECON 201 Principles of Macroeconomics | 4 | |
| **Mathematics** | | **8** |
| MATH 110 Contemporary Math | 4 | |
| MATH 210 Elementary Statistics | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **EGIS Interdisciplinary Concentration:** | | **60** |
| **Biology** | | **36** |
| BIOL 203 Foundations of Biology I | 4 | |
| BIOL 204 Foundations of Biology II | 4 | |
| BIOL 325 General Microbiology | 4 | |
| BIOL 326 Environmental Science *or* BIOL 436 Ecology | 4 | |
| BIOL 333 Genetics | 4 | |
| BIOL 403 Invertebrate Field Zoology | 4 | |
| BIOL 416 Vertebrate Field Zoology | 4 | |
| BIOL 422 Plant Taxonomy and Local Flora | 4 | |
| BIOL 438W Biology Seminar | 4 | |
| **Geography** | | **24** |
| GEOG 214 Physical Geography | 4 | |
| GEOG 216 GIS I: Digital Mapping | 4 | |
| GEOG 270 GIS II: Spatial Analysis | 4 | |
| GEOG 300 Remote Sensing | 4 | |
| GEOG 371 Multimedia Cartography | 4 | |
| GEOG 405 GIS Project Management | 4 | |
| **General Electives** | | **0-4** |
| **Total Required Credits** | | **128-136** |

# Undergraduate Courses

## BIOLOGY

**IDSC 201 Scientific Methods (4)**
Scientific approach to understanding the physical universe through an investigation of representative topics in physics, chemistry, and biology, paying particular attention to the sources of scientific information both for scientists and society. Interdisciplinary course taught by faculty in biology, chemistry, and physics. Meets general education requirement for natural and computational sciences. LEC 4. Prereq: Grade of C- or better in UCCA 102.

**BIOL 105 Principles of Biology (4)**
Study of the principles of life common to all living organisms. Topics include biological chemistry, cellular biology, inheritance, survey of animals and plants, and ecology. Designed for non-biology majors. Includes laboratory.

**BIOL 107 Contemporary Biology (4)**
Survey of contemporary biology, with emphasis on the interactions of humans with the biological world. Designed for non-biology majors. Includes laboratory.

**BIOL 110 Human Biology (4)**
Study of the biological principles of the human body from a human biology anatomical, physiological, and ecosociological perspective. Includes laboratory.

**BIOL 111 Animal Biology (4)**
Study of animal life from a cellular to organismal level with emphasis on animal taxonomy and environmental relationships. Includes laboratory.

**BIOL 112 Plant Biology (4)**
Study of the form, function, and classification of the plant kingdom. Includes laboratory. Offered: As needed.

**BIOL 203 Foundations of Biology I (4)**
Survey of cellular and subcellular biology, metabolism, physiology, genetics and the phylogeny, nomenclature, structure, and function of major animal taxa. Designed for biology and related majors. Includes laboratory.

**BIOL 204 Foundations of Biology II (4)**
Study of the phylogeny, nomenclature, structure, and function of plants, fungi, and algae in relation to the principles of ecology and natural selection. Designed for biology and related majors. Includes laboratory.

**BIOL 205 Biology in Great Britain (4)**
Survey of the contributions of the British to major concepts in biology such as DNA structure, natural selection, the experimental method, medicine, and biotechnology. Includes visits to museums of medicine and natural history, Kew Botanical Gardens, the London Zoo, Downe House of Kent, and other places of interest. Suitable for biology majors, minors, and interested non-majors. Offered: Jan Term, as needed.

**BIOL 217 Principles of Human Anatomy (4)**
Survey of microscopic and gross anatomy of the human body based upon animal dissection. Includes review of cell structure, tissue structure, and detailed anatomical studies of the human organ systems in a combined lecture and laboratory setting. Human cadaver prosection will be used to enhance anatomical demonstrations. Designed for students majoring in nursing, pre-pharmacy, physical education and sports medicine, allied health fields, or psychology. Students majoring in other areas must have special permission of the instructor.

**BIOL 218 Principles of Human Physiology (4)**
Introductory exploration of the basic physiology of the human body and the principles fundamental to normal and pathological functioning. Designed for students majoring in nursing, pre-pharmacy, physical education and sports medicine, allied health fields, or psychology. Students majoring in other areas must have special permission of the instructor. Lecture format.

**BIOL 225 Microbiology for Allied Health Sciences (4)**
Introduction to the study of microorganisms with special emphasis on their relation to human health and welfare. LEC 4, LAB 3. Prereq: One course in biology and one course in chemistry.

**BIOL 300W Mental Illness: A Biological Perspective (4)**
Study of the history of neuroscience, its scope and definition, neuron function, basic brain anatomy, basic neurochemistry, and the biological aspects of the major psychiatric disorders. Prereq: One semester of biology. Offered: Jan Term.

**BIOL 301 Mammalian Anatomy (4)**
Anatomical and histological study of the mammalian and human organ systems. Human cadaver dissection will be used to enhance anatomical demonstrations. Strongly recommended for students intending to pursue a biomedical graduate program. Includes laboratory. Prereq: BIOL 203 and 204, or one year of biology with permission of department.

**BIOL 302 Mammalian Physiology (4)**
Study of the function of the mammalian and human organ systems. Each week consists of four hours of lecture, laboratory demonstrations, films, slides, and case studies with an emphasis on normal and pathological conditions and critical thinking. Strongly recommended for students intending to pursue a biomedical graduate program. Prereq: BIOL 203 and 204, or one year of biology with permission of department. May be taken concurrently with BIOL 301.

**BIOL 303 Experimental Physiology (4)**
Combined lecture/laboratory experience that provides a nucleus of experimental procedures and techniques of animal physiology. Includes several classical physiological laboratory exercises and an original investigative research project. Strongly recommended for students intending to pursue a biomedical graduate program and for students interested in the acquisition of small animal surgery and experimental techniques. Prereq: BIOL 301. Prereq or co-req: BIOL 302. Offered: Fall.

**BIOL 306 Principles of Bioinformatics (4)**
Interdisciplinary approach to science – biological and computational - to gain new insights into complex living systems. Methods developed in this discipline address outstanding questions in medicine, behavior, health, pharmacy, genetics, the environment, and other biologically related areas. Co-listed as COSC 306. Prereqs for all majors: BIOL 105, 110, or 203; or permission of the instructor. Additional prereqs for computer science majors: COSC 200 and COSC 210, with grades of C or better. Offered: As needed.

**BIOL 311 Histology (4)**
Study of the microscopic anatomy of the tissues and organs of vertebrate animals, particularly mammals. Strongly recommended for students seeking professional careers or graduate school. Includes laboratory. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Fall.

**BIOL 314 Embryology (4)**
Comparative study of the origin and development of vertebrate embryos, emphasizing developmental principles. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Spring.

**BIOL 319 Island Ecology (4)**
International travel course to tropical or subtropical island ecosystems (Belize or Andros Island, Bahamas). Focus on terrestrial and marine ecosystems and the impact of human culture and economy. Offered: Jan Term.

**BIOL 325 General Microbiology (4)**
Study of the form and function of microbial organisms, especially bacteria, and of their relation to man. Restricted to biology majors. LEC 4, LAB 3. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Fall and Spring.

**BIOL 326 Environmental Science (4)**
Study of the relationship of humans to the environment on current environmental problems. Prereq: BIOL 203 and 204, or one year of biology with permission of department.

**BIOL 327 Conservation Ecology (4)**
Study of the basic principles of ecology which relate to the utilization and conservation of the earth's biological resources. Includes ecosystem dynamics, population ecology, wildlife and fisheries techniques, the economics of conservation, and issues relating to the protection of endangered species. Includes laboratory. Prereq: Any 100-level biology course. Offered through Metro Programs only as MPBI 327.

**BIOL 333 Genetics (4)**
Introductory study of the inheritance of similarities and variations in plants and animals with practical aspects as applied to man. Prereq: BIOL 203 and 204, or one year of biology with permission of department.

**BIOL 334 Experimental Genetics (4)**
Laboratory-based study of current genetic laboratory methodologies, including cytogenetics and karyotypic analysis, transmission analysis, DNA isolation and fragmentation, cloning, chromosome mapping, and fingerprinting. Prereq: BIOL 333. Offered: As needed.

**BIOL 337 Infectious Diseases (4)**
Detailed study of microbe-host interaction and the linkage of basic microbiology to clinical infectious diseases. Designed to extend and enhance the knowledge of prehealth professionals beyond the material covered in introductory or general microbiology courses. Prereq: BIOL 225 or BIOL 325. Offered: Jan Term.

**BIOL 340 Amazon Rain Forest (4)**
Field investigation of the Peruvian Amazon Rain Forest ecosystem. Emphasis on the complex relationship between tropical plants, vertebrate and invertebrate animals, and natives of the area. Offered: Jan Term.

**BIOL 344 Principles of Immunology (4)**
Study of the immune system and host defense strategies against microorganisms and tumors. Recommended for students planning a health-related clinical or research career. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Jan Term.

**BIOL 361 Hospital Internship (4)**
Supervised internship in a hospital setting, with exposure to various aspects of hospital operations. Grading is pass/fail only. Co-listed as CHEM 361. Offered: Jan Term only, with schedule arranged on an individual basis.

**BIOL 402 Challenge to Sustainability: Conserving Kenya's Biodiversity (4)**
Exploration of local, national, and international efforts to manage and conserve Kenya's biodiversity. Topics include the biogeography of Kenya, the people and history of Kenya, current issues in Kenyan conservation, and the role of sustainable development in the conservation of natural resources. Includes a 15-day safari to Kenya with visits and fieldwork at the Masai Mara Game Reserve, the Taita Discovery Center, and Tsavo National Park. Taught in Kenya. Co-listed as ENVM 528. Offered: Summer.

**BIOL 403 Invertebrate Field Zoology (4)**
Study of the classification, morphology, physiology, and natural history of invertebrate phyla. LEC, LAB. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Fall.

**BIOL 405W Cell and Molecular Biology (4)**
Study of the cell as it relates to the underlying structure and function of higher organisms. Emphasis given to human cell physiology, cytogenetics, and immunology. Lectures are supplemented by laboratory demonstrations, videos, slides, and case studies that require critical thinking. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Fall.

**BIOL 406 Experimental Cell Biology (4)**
Introduction to the science and methods of techniques used to study the cell and its functions in a lecture/laboratory-based course. Includes laboratory techniques used in microscopy, cell fractionation, protein purification, enzyme analysis, and DNA manipulation. Prereq: BIOL 405W.

**BIOL 416 Vertebrate Field Zoology (4)**
Field study of the classification and identification of the major groups of vertebrate animals. LEC, LAB. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Spring.

**BIOL 422 Plant Taxonomy and Local Flora (4)**
Study of the systems of plant classification, emphasizing recognition of local flora. LEC 2, LAB 4. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Spring.

**BIOL 423 Medical Microbiology (4)**
Survey of pathogenic microorganisms and their characteristics, diseases they cause, and clinical methods of control. Prereq: BIOL 325. Offered: Spring.

**BIOL 425 Basic Pathology (4)**
Study of the basic causes and mechanisms of cellular and organ dysfunction due to the influences of disease and chemical agents. LEC, LAB. Prereqs: BIOL 217 and BIOL 218, or BIOL 301 and BIOL 302, or permission of department. Offered: Spring.

**BIOL 432 Internship in Environmental Science (4)**
Supervised work experience in a local organization dealing with the environment. Offered: As needed.

**BIOL 436 Ecology (4)**
Study of the interactions of organisms in their environments with emphasis upon natural communities. The laboratory demonstrates basic techniques of ecological investigations by designing and carrying out field experiments, collecting and analyzing data, and drawing conclusions for scientific-quality publications. LEC, LAB. Prereq: BIOL 203 and 204, or one year of biology with permission of department. Offered: Fall.

**BIOL 438W Biology Seminar (4)**
Biology capstone course which emphasizes critical thinking and scientific writing/speaking. Required of all biology majors during the senior year. Prereq: Math and chemistry requirements for a biology major.

**BIOL 439 Research (1)**
Independent, directed-field, or laboratory research. Research topics must be selected by the student and approved by the Independent Research Screening Committee before registration. This course will not satisfy any of the credits of upper-level biology electives required for a major in biology nor the laboratory science general education requirement. Prereq: Permission of a supervising biology professor and approved project proposal.

**BIOL 440 Research (2)**
Independent, directed field, or laboratory research. Research topics must be selected by the student and approved by the Independent Research Screening Committee before registration. This course will not satisfy any of the credits of upper-level biology electives required for a major in biology nor the laboratory science general education requirement. Prereq: Permission of a supervising biology professor and approved project proposal.

**BIOL 441 Research (3)**
Independent, directed-field, or laboratory research. Requirement involves a written paper of scientific merit. Research topics must be selected by the student and approved by the Independent Research Screening Committee before registration. This course will not satisfy any of the credits of upper-level biology electives required for a major in biology nor the laboratory science general education requirement. Prereq: Permission of a supervising biology professor and approved project proposal

## MARINE SCIENCE

Courses are offered only at the Dauphin Island Sea Lab operated by the Marine Environmental Sciences Consortium of which Samford University is an active member. A minimum of at least one year of biology (preferably more) is required before any upper-level course in marine science may be attempted. Admission into all courses is subject to ultimate approval by the instructor. Unless otherwise indicated, marine science courses (MARS) are offered during the summer.

**MARS 205 Marine Biology (4)**
General survey of invertebrates, vertebrates, and marine plants as communities with emphasis on local examples of these principal groups. Students examine marshland, estuarine, beach, dune inlet and neritic habitats, and niches. Includes lectures, laboratory, and field work.

**MARS 403 Marine Invertebrate Zoology (4)**
Study of the natural history, systematics, and morphology of marine invertebrates from a variety of habitats in the Gulf of Mexico, oriented toward a field and laboratory approach. Participation in extended field trips required. Prereq: Introductory zoology.

**MARS 406 Coral Reef Ecology (4)**
Examination of ecology and evolution of coral reef communities, seagrass beds, and mangrove swamps, with exploration of such issues as the degradation of reef-building corals by macroalgae, hurricanes, coral bleaching, diseases of corals and sea urchins, overfishing, and pollution. Students participate in lectures and field exercises in the vicinity of Dauphin Island, and take a one-week field trip to Andros Island, Bahamas. Prereq: A course in either undergraduate biology or ecology. See Instructor.

**MARS 407 Marine Behavioral Ecology (4)**
Examination of how animal behavior is influenced by and interacts with its environment, and the ecological and evolutionary significance of this behavior in a marine setting. Students learn principles of behavioral ecology as they relate to marine animals, become familiar with techniques for observing animal behavior and conducting experiments, and are introduced to methods for collecting and analyzing behavioral data. Includes lectures, laboratory exercises and experiments, and overnight field trips. Designed to provide students with a strong background for further studies in marine animal behavior. Prereq: Introductory courses covering vertebrate and invertebrate zoology; introductory statistics recommended. See instructor.

**MARS 411 Marine Vertebrate Zoology (4)**
Study of marine fishes, reptiles, and mammals, with an in-depth, comprehensive treatment of their systematics. Lectures encompass subject matter on a nonregional basis. Field and laboratory work stresses the vertebrate fauna of the northern Gulf of Mexico. Students have an opportunity to assemble a collection of vertebrate species. Prereq: Two semesters of general biology.

**MARS 412 Marine Botany (4)**
General survey of marine algae and vascular and nonvascular plants associated with marine environments. Includes distribution, identification, structure, ecology, and reproduction. Prereq: General biology.

**MARS 435 Estuarine Biology (4)**
Comprehensive survey of the biological characteristics and supportive physical and chemical features of the estuarine system. Prereqs: BIOL 111, BIOL 436, and one course in chemistry.

**MARS 436 Marine Ecology (4)**
Study of marine organisms as they interact with each other and their environment, and examination of theories and the experimental basis of current knowledge. Laboratory consists of field trips to a wide variety of marine habitats, with field problems examined by small groups of students. Includes study of factors influencing population dynamics, community structure, and energy flow in marine ecosystems. Habitats selected for emphasis include coral reefs, kelp forests, seagrass meadows, the rocky intertidal, and deep-sea hydrothermal vents. Participation in an overnight field trip is required. Advanced course open to juniors, seniors, and graduate students. Prereq: General biology, marine biology or graduate standing.

**MARS 439 or MARS 440 Research or Special Topics (1-6 each course)**
Students may enroll by special arrangement in any of the subjects listed. Students should note in which term they wish to take special topics in a particular subject. Only Marine Science Programs resident faculty will be available for special topics during both terms. Other instructors will be available only in the time period listed for their respective courses. Prereq: Permission of the instructor.

## Graduate Programs and Requirements

### Degree
Master of Science in Environmental Management (M.S.E.M.)

### Joint-Degree
Master of Science in Environmental Management/Juris Doctor (M.S.E.M./J.D.)

### Environmental Management
The master of science in environmental management (M.S.E.M.) is a 36-credit, non-thesis program conducted by the Department of Biological and Environmental Sciences. It directs working professionals through a collection of courses to prepare them for the decision-making processes of the ever-increasing demands of environmental regulatory compliance.

A joint graduate degree in environmental management and law (M.S.E.M./J.D.) is offered in conjunction with the Cumberland School of Law. Contact the Cumberland School of Law for more information.

#### Graduate Admission Requirements
Three levels of admission status are designated:

1. Regular admission after three years of relevant work experience:
   a. Graduation from an accredited college or university with an overall GPA of at least 2.50.
   b. A minimum of three years relevant work experience
   c. Two letters of reference from nonrelated persons.
2. Regular admission for recent college graduates (three years or less since award of undergraduate degree):
   a. Graduation from an accredited college or university with an overall minimum GPA of 3.00.
   b. A GRE score of at least 1,000 or a MAT score of at least 50, taken within the last five years.
   c. Two letters of reference from nonrelated persons.
3. Provisional Admission: Provisional admission may be granted upon demonstrating seriousness of purpose and ability to succeed in the program. This status will be considered for applicants who do not meet all requirements for regular admission as listed above. The applicant must furnish two letters of recommendation from two nonrelated persons. If offered provisional admission, the student must complete the first six semester hours with no grade lower than a B. Upon demonstrating this level of work, the student will qualify for admission to regular graduate status.

#### Required Credentials for Admission
Each student must submit official transcripts from all colleges and universities attended. In order for transcripts to be official, they must be sent directly from the student's college/university to the Office of Admission, Samford University, 800 Lakeshore Drive, Birmingham, AL 35229. Transcripts sent to faculty or other offices on campus are not official. In addition, GRE or MAT scores must be sent directly to the Office of Admission from the testing agency. Scores furnished from other sources are not considered to be official.

#### Notification of Admission
Official notification of admission is communicated by letter from the Office of Admission. In the case of provisional admission, the letter may stipulate certain conditions which must be met by the applicant.

#### Prerequisites for Graduate Admission
While interdisciplinary in nature and accepting candidates with a variety of backgrounds and degrees, the program is heavily technical and scientific in design. Applicants will ideally have some training in the biological and physical sciences. If the admission committee notes a lack of scientific background in an applicant's preparation, it will require the student to complete a cell-based general biology course, specifically approved by the program directors, PRIOR to taking any of the scientifically-oriented courses in the program, with the exception of ENVM 501 (Biological and Environmental Chemistry). This cell-based general biology course may be an undergraduate course and will not count towards the 36 credits required for degree completion.

### Master of Science in Environmental Management

| Master of Science in Environmental Management Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Environmental Management Core** | | | **12** |
| ENVM 501 | Biological and Environmental Chemistry | 3 | |
| ENVM 502 | Environmental Law and Regulation | 3 | |
| ENVM 503 | Quantitative Methods for Environmental Decision Makers | 3 | |
| ENVM 504 | Basic Toxicology | 3 | |
| **Environmental Management Electives** (choose eight courses) | | | **24** |
| ENVM 505 | Environmental Mgt-A Case Perspective | 3 | |
| ENVM 506 | Environmental Risk Assessment & Mgt | 3 | |
| ENVM 507 | Technology/Mgt of Hazardous Materials | 3 | |
| ENVM 508 | Ecotoxicology for the Environmental Mgr | 3 | |
| ENVM 509 | GIS & Environmental Management Issues | 3 | |
| ENVM 510 | Environmental Ethics and Values | 3 | |
| ENVM 511 | Environmental Total Quality Management | 3 | |
| ENVM 512 | Environmental Project Management | 3 | |
| ENVM 514 | Wetlands | 3 | |
| ENVM 515 | Endangered Species | 3 | |
| ENVM 516 | Research | 3 | |
| ENVM 517 | Soil, Water, and Air Sampling and Analysis for the Environmental Manager | 3 | |
| ENVM 518 | Environmental Litigation | 3 | |
| ENVM 519 | Conservation Biology and Natural Resource Management | 3 | |
| ENVM 520 | Occupational Safety and Health Law/Policy | 3 | |
| ENVM 521 | Risk Analysis | 3 | |
| ENVM 522 | Environmental Economics | 3 | |
| ENVM 524 | Environmental Geology | 3 | |
| ENVM 525 | Environmental Forestry | 3 | |
| ENVM 526 | Environmental Auditing | 3 | |
| ENVM 527 | Sociology of the Environment | 3 | |
| ENVM 528 | Challenge to Sustainability: Conserving Kenya's Biodiversity | 3 | |
| | **Total Required Credits** | | **36** |

#### Acceptable Academic Progress (Minimum GPA)
Students in the M.S.E.M. program must maintain an overall 3.00 GPA in all graduate work. If a student earns a grade of D, F, or WF in any M.S.E.M. program course, or if his/her GPA falls below 3.00, the program director and relevant faculty must consider the student's promise and potential for successful completion of the program.

#### Transfer Credit
Up to nine semester credits/hours of appropriate and approved graduate coursework completed at another institution may be substituted for program course requirements. Coursework requested to be transferred must have been completed with a grade of at least B in each course. Such coursework must be the equivalent of a full semester's work (specifically, a course taken for three quarter-hours is NOT the equivalent of a three semester credit/hour course) and be supported by official transcripts and appropriate syllabi. Acceptance of such credit is solely the authority of the program directors.

#### Time Limit
All courses required for the master of science in environmental management must be completed within a period of five years from the academic session of first admission.

#### Comprehensive Examination
All students who are candidates for graduation must successfully pass a written comprehensive examination during their last term of enrollment. The examination is designed to assess substantive knowledge in the field of environmental management, analytical reasoning and writing proficiency. Grading will be on a pass/fail basis.

## Graduate Courses

### ENVIRONMENTAL MANAGEMENT

NOTE: The environmental management graduate program follows the Nine-Week Session calendar of one summer term, two fall terms (A & B) and two spring terms (A & B). Unless otherwise indicated, all environmental management (ENVM) courses are offered on rotation.

**ENVM 501 Biological and Environmental Chemistry (3)**
Application of chemical and biochemical principles to environmental problems and solutions. Course provides the nonscientist with the necessary chemical/biochemical concepts to assimilate the scientific aspects of environmental management. Required. Offered: Fall Term A and Spring Term A.

**ENVM 502 Environmental Law and Regulation (3)**
Overview of federal environmental laws and regulations. Salient topics include air and water quality, toxic substance regulation, and waste management. Required. Offered: Fall Term A and Spring Term A.

**ENVM 503 Quantitative Methods for Environmental Decision Makers (3)**
Study of quantitative/statistical methods for managers who conduct or design environmental monitoring and sampling programs, develop and interpret quantitative data, and prepare projections. Includes use of environmental examples and problems, with emphasis on real-world applications. Required. Prereq: Working knowledge of Windows environment. Offered: Fall Term B and Spring Term B.

**ENVM 504 Basic Toxicology (3)**
Examination of the basics of applied toxicology for the non-technician. Course covers experimental toxicology, definitions, biochemical mechanisms, and signs of exposure and insult. Includes an overview of how toxic materials enter the body, how they interact with the body, and how they are eliminated. Students learn specific toxic effects of metals, pesticides, and solvents. Required. Prereq: ENVM 501. Offered: Fall Term B and Spring Term B.

**ENVM 505 Environmental Management - A Case Perspective (3)**
Study of the complexity of environmental management using the case method. Emphasis on the managerial skills required to administer complex environmental problems, the need for multidisciplinary analysis, and the application of problem-solving methodologies.

**ENVM 506 Environmental Risk Assessment and Management (3)**
Review of the basic principles and methods for conducting a risk assessment. Students examine both the values and limitations of risk assessment by focusing on environmental and health risks. Includes review of how risk management decisions are made in the public and private sectors and explains how to communicate to the public environmental and health risks, as well as public policy choices and tradeoffs. Prereqs: ENVM 501, 502, 503, and 504.

**ENVM 507 Technology and Management of Hazardous Materials (3)**
Review of current technology in storage, handling, and transportation of hazardous materials and wastes. Emphasis on safe, efficient, and legally sufficient management techniques. Includes: presentation of methods for identification and classification of hazardous and toxic materials, substances, and wastes; review of spills and specific procedures to prevent incidents and to protect human health and the environment; and examination of OSHA training requirements, packaging and labeling procedures, storage compatibility and capacity, transportation requirements, and legal responsibilities. Prereqs: ENVM 501, 502, and 504.

**ENVM 508 Ecotoxicology for the Environmental Manager (3)**
Introduction to the dynamics of the ecosystem and the effects of toxic substances on the living and nonliving components. Topics include the role of indicator species on ecosystem health, nature of key species in ecosystem functioning, loss of biodiversity under toxicological insult, and methods for monitoring ecosystem health and restoration. Several major case studies are examined to illustrate ecotoxicological concepts. Prereq: ENVM 504.

**ENVM 509 Geographic Information Systems (GIS) and Environmental Management Issues (3)**
Introduction to the basics of Geographic Information Systems (GIS). Overview of relevant theory, software, hardware, databases, and applications. Trends in GIS technology are examined from the managerial perspective. Examples are drawn from current environmental projects.

**ENVM 510 Environmental Ethics and Values (3)**
Examination of ethical considerations in environmental decision-making. Discussion of personal versus organizational attitudes, cultural economic and historical values, science versus politics, and international and intergenerational issues. Includes study of humankind's relationship with the environment. Students are encouraged to develop a personal philosophy relative to their role in the regulatory, technical, scientific, legal, or corporate management of the environment.

**ENVM 511 Environmental Total Quality Management (TQM) (3)**
Introduction to the concepts and techniques of Total Quality Management (TQM) from the environmental perspective. Topics include understanding the fundamentals of environmental TQM, organizing for environmental compliance using TQM techniques, applying total quality auditing techniques, and using TQM for measuring environmental success and costs. Goal communication within the organization is explored. Real-life case studies are utilized throughout the course.

**ENVM 512 Environmental Project Management (3)**
Examination of environmental project management from the governmental, industrial, and contractor perspectives. Includes review of successful project management organization, planning, and communication strategies, plus the scope and types of contractual assistance. Using real-life examples, students examine complex projects needing management. Prereqs: ENVM 501, 502, 503, and 504.

**ENVM 514 Wetlands (3)**
Introduction to the development, structure, and importance of wetlands, including the background necessary to understand the current controversies concerning wetland protection. Instructional methods include lecture, problem sheets, and field exercises. Prereqs: ENVM 501, 502, 503, and 504.

**ENVM 515 Endangered Species (3)**
Study of evolutionary mechanisms, species concepts, and taxonomic and systematic principles as applied to species-level taxon. Includes examination of how federal and state laws relating to endangered species affect decision-making of environmental managers. Prereq: ENVM 502.

**ENVM 516 Research (3)**
Students pursue a research topic of special interest under the direction of an ENVM faculty member or an outside expert jointly agreed upon by course coordinator and student. This research provides an opportunity for senior graduate students to integrate their knowledge in real-world, problem-solving situations. Prereqs: ENVM 501, 502, 503, and 504.

**ENVM 517 Soil, Water, and Air Sampling and Analysis for the Environmental Manager (3)**
Review of the basics of modern environmental analysis. Topics include proper field sampling and preservation, legal aspects, traceability, and chain of custody records. Aspects of a quality assurance and quality control program are addressed, as well as fundamentals of laboratory instrumentation and air quality monitoring. Prereqs: ENVM 501 and ENVM 503.

**ENVM 518 Environmental Litigation (3)**
Study of the process of environmental litigation, focusing on the role of an environmental manager, commonly litigated issues, and alternatives to litigation. Prereq: ENVM 502.

**ENVM 519 Conservation Biology and Natural Resource Management (3)**
Study of the basic theories, models, and techniques of the science of conservation biology and their utilization in the conservation and management of natural resources. Prereqs: ENVM 502 and ENVM 505.

**ENVM 520 Occupational Safety and Health Law and Policy (3)**
Examination of the relationship between federal occupational safety and health statutes to the work environment. Particular emphasis placed on the rights, duties, and responsibilities under the Occupational Safety and Health Act of 1970. Prereqs: ENVM 502 and ENVM 504.

**ENVM 521 Risk Analysis (3)**
Exploration of the risk analysis framework, focusing on its interplay between science and politics as an approach to managing health and environmental hazards. "Risk Analysis" is defined broadly to encompass the interrelated tasks of risk assessment, risk evaluation, risk management, and risk communication. Students are exposed to a synoptic perspective on how environmental problems, goals, and policies are actually shaped in the complex world of competing interests, conflicting ideologies, and incomplete understanding. Prereq: ENVM 506 or permission of the instructor.

**ENVM 522 Environmental Economics (3)**
Policy orientation to environmental issues, focusing on the economic theory which drives the policy. Emphasis on the strong international thrust which integrates economic development with environmental policy. Prereqs: ENVM 502, 503, 504, 505, and 507.

**ENVM 524 Environmental Geology (3)**
Application of geological and hydrogeological principles to environmental management issues including groundwater and soil assessment, site remediation, and risk assessment. Includes introductory geology and hydrogeology background necessary to understand environmental geology as related to environmental management, environmental policy, and applicable environmental regulations. Applications of groundwater modeling, aquifer testing techniques, map reading, groundwater regulations, and the application of geology to current soil and groundwater remediation technology, landfill siting, and wellhead protection are introduced. Prereq: ENVM 501.

**ENVM 525 Environmental Forestry (3)**
Review of the principles of forest ecology and management and the subsequent environmental concerns that occur with various practices. Includes: examination of the historical developments of American forests and comparison of past conditions with current health; study of abiotic and biotic components of forest habitats, including forest soils, productivity, climatic factors, and biological diversity; and discussion of principles of silviculture, including forest regeneration, intensive forest management and best management practices for the control of nonpoint pollution. Students gain a basic understanding of management principles enabling them to balance both economic and environmental forest concerns.

**ENVM 526 Environmental Auditing (3)**
Study of the fundamentals of environmental auditing. Topics include: elements of the audit process, property transfer audits, waste contractor audits, waste minimization audits, international audits, and managing and critiquing an audit program. Students are required to perform practical exercises individually or in small groups.

**ENVM 527 Sociology of the Environment (3)**
Introduction to the idea that humans not only react to the environment but also shape it, based on the assumption that human capacity to act on the environment is more complex than that for any other living species. Focus on the capacity of humans to define the environment as something to be manipulated, guided by the constructed aims of human groups. Central concepts include human beliefs, values and institutions, social inequality in power and influence, demographic shifts and technology, political/economic organization, and globalization as an historical process in human organization.

**ENVM 528 Challenge to Sustainability: Conserving Kenya's Biodiversity (3)**
Exploration of local, national, and international efforts to manage and conserve Kenya's biodiversity. Topics include the biogeography of Kenya, the people and history of Kenya, current issues in Kenyan conservation, and the role of sustainable development in the conservation of natural resources. Includes a 15-day safari to Kenya with visits and fieldwork at the Masai Mara Game Reserve, the Taita Discovery Center, and Tsavo National Park. Taught in Kenya. Co-listed as BIOL 402.

# Chemistry and Biochemistry

## Faculty

Morgan S. Ponder, Chair, Professor
Brian W. Gregory, Professor
James H. Haggard, Professor
David G. Garza, Associate Professor
Robert P. Cameron, Assistant Professor
Denise J. Gregory, Assistant Professor

## Undergraduate Programs and Requirements

### Majors
Biochemistry
Chemistry

### Minor
Chemistry

The Department of Chemistry and Biochemistry offers majors in chemistry and in biochemistry leading to a bachelor of science degree. A student who is majoring in chemistry or biochemistry is not required to earn a minor in another area. The department also offers a minor in chemistry.

**University Core Curriculum and General Education Requirements**
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Chemistry and biochemistry majors must take MATH 240 (Calculus I) to satisfy the general education mathematics requirement, and PHYS 203 and PHYS 204 (Physics I and II, respectively) to satisfy the general education natural and computational sciences requirement.

## Courses

**IDSC 201 Scientific Methods (4)**
Scientific approach to understanding the physical universe through an investigation of representative topics in physics, chemistry, and biology, paying particular attention to the sources of scientific information both for scientists and society. Interdisciplinary course taught by faculty in biology, chemistry, and physics. Meets general education requirement for natural and computational sciences. LEC 4. Prereq: Grade of C- or better in UCCA 102.

**CHEM 108 General, Organic, and Biological Chemistry (3)**
Study of the chemistry needed to understand human physiology. When taken with CHEM 109, this course meets the chemistry requirement for nursing students and a general education requirement for natural and computational sciences for most other majors. Students who have a C- or better in CHEM 205 may not take CHEM 108 for credit. LEC 3. Co-req: CHEM 109. Offered: Fall, Jan Term, and Spring.

**CHEM 109 General, Organic, and Biological Chemistry Laboratory (1)**
Laboratory to accompany CHEM 108. LAB 3. Co-req: CHEM 108. Offered: Fall, Jan Term, and Spring.

**CHEM 205 Foundations of Chemistry (3)**
Survey of chemical principles. Includes types of chemical reactions, stoichiometry, gases, thermodynamics, atomic and molecular structure, solutions, kinetics, and basic equilibrium. When taken with CHEM 206, meets a general education requirement for natural and computational sciences. LEC 3. Co-req: CHEM 206 and MATH 150, or score on placement exam sufficient to qualify for MATH 240. Offered: Fall, Spring, and Summer 1.

**CHEM 206 Foundations of Chemistry Laboratory (1)**
Laboratory to accompany CHEM 205. LAB 3. Co-req: CHEM 205. Offered: Fall, Spring, and Summer 1.

**CHEM 215 Fundamentals of Organic Chemistry (3)**
Survey of structures and reactions of the principal classes of carbon compounds. LEC 3. Co-req: CHEM 216. Prereq: Grade of C- or better in CHEM 205. Offered: Fall, Spring, and Summer 1.

## Chemistry Major

The program outlined below will provide a student with a broad background in the chemical sciences. A student completing this program would be equipped for an entry-level position within the chemical industry. A student completing this program would also be well prepared to pursue graduate work in chemistry or a chemistry-related field. This program would also provide an excellent preparation for medical school, dental school, pharmacy, and other health-related professional programs.

| Chemistry Major Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements:** | | | **32-44** |
| **Natural and Computational Sciences** | | | **10** |
| PHYS 203 | Physics I | 5 | |
| PHYS 204 | Physics II | 5 | |
| **Social Sciences** | | | **4** |
| **Mathematics** | | | **4** |
| MATH 240 | Calculus I | 4 | |
| **World Languages** | | | **4-16** |
| **Fine Arts** | | | **4** |
| **Humanities** | | | **4** |
| **Physical Activity** | | | **2** |
| **Chemistry Major:** | | | **39** |
| **Chemistry** | | | **35** |
| CHEM 205 | Foundations of Chemistry | 3 | |
| CHEM 206 | Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 | Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 | Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 | Organic Reactions & Mechanisms | 3 | |
| CHEM 316 | Organic Reactions & Mechanisms Lab | 1 | |
| CHEM 325 | Quantitative Analysis | 3 | |
| CHEM 326 | Quantitative Analysis Laboratory | 1 | |
| CHEM 350 | Biochemistry | 3 | |
| CHEM 355 | Inorganic Chemistry | 3 | |
| CHEM 365 | Physical Chemistry | 3 | |
| CHEM 370W | Unified Laboratory I | 2 | |
| CHEM 375 | Unified Laboratory II | 2 | |
| CHEM 425 | Spectroscopy | 3 | |
| CHEM 460W | Senior Seminar | 3 | |
| **Mathematics** | | | **4** |
| MATH 260 | Calculus II | 4 | |
| **General Electives** | | | **23-35** |
| | | **Total Required Credits** | **128** |

**CHEM 216 Fundamentals of Organic Chemistry Laboratory (1)**
Laboratory to accompany CHEM 215. LAB 3. Co-req: CHEM 215. Offered: Fall, Spring, and Summer 1.

**CHEM 315 Organic Reactions and Mechanisms (3)**
Amplification of CHEM 215, with an emphasis on reaction mechanisms. LEC 3. Co-req: CHEM 316. Prereq: Grade of C- or higher in CHEM 215. Offered: Fall, Spring, and Summer 2.

**CHEM 316 Organic Reactions and Mechanisms Laboratory (1)**
Laboratory to accompany CHEM 315. LAB 3. Co-req: CHEM 315. Offered: Fall, Spring, and Summer 2.

**CHEM 325 Quantitative Analysis (3)**
Study of quantitative analytical techniques for separating, identifying, and quantifying chemical compounds. Includes statistical analysis and gravimetric, titrimetric, electrochemical, and spectrochemical methods. Emphasis is given to the physical and chemical principles upon which different analytical techniques are based. LEC 3. Co-req: CHEM 326. Prereq: Grade of C- or better in CHEM 205. Offered: Fall, Spring, and Summer 2.

**CHEM 326 Quantitative Analysis Laboratory (1)**
Laboratory to accompany CHEM 325. LAB 1. Co-req: CHEM 325. Offered: Fall, Spring, and Summer 2.

## Biochemistry Major

The program outlined below will provide a student with a broad background in biochemistry. A student completing this program would be equipped for an entry-level position within the biotechnology industry. A student completing this program would also be well prepared to pursue graduate work in biochemistry or a related field. This program would also provide an excellent preparation for medical school, dental school, pharmacy, and other health-related professional programs.

| Biochemistry Major Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements:** | | | **32-44** |
| **Natural and Computational Sciences** | | | **10** |
| PHYS 203 | Physics I | 5 | |
| PHYS 204 | Physics II | 5 | |
| **Social Sciences** | | | **4** |
| **Mathematics** | | | **4** |
| MATH 240 | Calculus I | 4 | |
| **World Languages** | | | **4-16** |
| **Fine Arts** | | | **4** |
| **Humanities** | | | **4** |
| **Physical Activity** | | | **2** |
| **Biochemistry Major:** | | | **50** |
| **Biology** | | | **16** |
| BIOL 203 | Foundations of Biology I | 4 | |
| BIOL 204 | Foundations of Biology II | 4 | |
| BIOL 333 | Genetics | 4 | |
| BIOL 405W | Cell and Molecular Biology | 4 | |
| **Chemistry** | | | **30** |
| CHEM 205 | Foundations of Chemistry | 3 | |
| CHEM 206 | Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 | Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 | Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 | Organic Reactions & Mechanisms | 3 | |
| CHEM 316 | Organic Reactions & Mechanisms Lab | 1 | |
| CHEM 325 | Quantitative Analysis | 3 | |
| CHEM 326 | Quantitative Analysis Laboratory | 1 | |
| CHEM 350 | Biochemistry | 3 | |
| CHEM 365 | Physical Chemistry | 3 | |
| CHEM 370W | Unified Laboratory I | 2 | |
| CHEM 430 | Advanced Biochemistry | 3 | |
| CHEM 460W | Senior Seminar | 3 | |
| **Mathematics** | | | **4** |
| MATH 260 | Calculus II | 4 | |
| **General Electives** | | | **12-24** |
| | | **Total Required Credits** | **128** |

## Chemistry Minor

| Chemistry Minor Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Chemistry Core** | | | **16** |
| CHEM 205 | Foundations of Chemistry | 3 | |
| CHEM 206 | Foundations of Chemistry Laboratory | 1 | |
| CHEM 215 | Fundamentals of Organic Chemistry | 3 | |
| CHEM 216 | Fundamentals of Organic Chemistry Lab | 1 | |
| CHEM 315 | Organic Reactions & Mechanisms | 3 | |
| CHEM 316 | Organic Reactions & Mechanisms Lab | 1 | |
| CHEM 325 | Quantitative Analysis | 3 | |
| CHEM 326 | Quantitative Analysis Laboratory | 1 | |
| **Chemistry Electives (choose two)** | | | **6-7** |
| CHEM 350 | Biochemistry | 3 | |
| CHEM 355 | Inorganic Chemistry | 3 | |
| CHEM 365 | Physical Chemistry | 3 | |
| CHEM 380 | Scientific Methods of Computer-Based Instrumentation | 4 | |
| | | **Total Required Credits** | **22-23** |

**CHEM 345 Nutritional Biochemistry (3)**
Survey of the chemistry of biological systems, with emphasis on applications to allied health fields. LEC 3. Prereq: Grade of C- or better in CHEM 215. Offered: Fall.

**CHEM 350 Biochemistry (3)**
Survey of the chemistry of biological systems. LEC 3. Prereq: Grade of C- or better in CHEM 315. Offered: Spring.

**CHEM 355 Inorganic Chemistry (3)**
Study of the chemistry of inorganic compounds, reactions and mechanisms, including coordination compounds and organometallic compounds. LEC 3. Prereq: Grade of C- or better in CHEM 315 and CHEM 325. Offered: Fall.

**CHEM 361 Hospital Internship (4)**
Supervised internship in a hospital setting, with exposure to various aspects of hospital operations. Grading is pass/fail only. Co-listed as BIOL 361. Offered: Jan Term only, with schedule arranged on an individual basis.

**CHEM 365 Physical Chemistry (3)**
Survey of the theoretical bases on which chemistry rests, including kinetic-molecular theory, thermodynamics, kinetics, and quantum theory. LEC 3. Prereq: Grade of C- or better in CHEM 215, MATH 260, and PHYS 204, or permission of instructor. Offered: Fall.

**CHEM 370W Unified Laboratory I (2)**
First course in the unified laboratory sequence. The unified labs combine elements from traditional upper-level inorganic, physical, instrumental, and biochemistry laboratories. Unified Lab I will explore buffers, thermodynamics of biomolecules, kinetics of inorganic and biological systems, catalysis, stereochemistry, and gas chromatography/mass spectrometry. LAB 6. Prereq: Grade of C- or better in CHEM 325. Offered: Fall.

**CHEM 375 Unified Laboratory II (2)**
Second course in the unified laboratory sequence. The unified labs combine elements from traditional upper-level inorganic, physical, instrumental, and biochemistry laboratories. Unified Lab II will focus on purification in biological systems, electrochemical synthesis, organometallic chemistry, spectroscopic analysis, and coulometry. LAB 6. Prereq: Grade of C- or better in CHEM 370. Offered: Spring.

**CHEM 380 Scientific Methods of Computer-Based Instrumentation (4)**
Survey of computer-based instrumentation and software/hardware integration used to develop experiments or tests. Covers laboratory programming using fourth-generation visual computer language, acquisition and conditioning of real-world signals, and control of ASCII conversation-based bench-top instruments. LEC 3, LAB 3. Prereq: Grade of C- or better in PHYS 102 or PHYS 204 and COSC 110 or equivalent. Co-listed as COSC 380 and PHYS 380. Offered: On rotation.

**CHEM 425 Spectroscopy (3)**
Study of the theoretical and practical bases of modern spectroscopic techniques, including atomic, vibrational, rotational, magnetic, electronic, and laser spectroscopy. Electroanalytical techniques will also be included. LEC 3. Prereq: Grade of C- or better in CHEM 355 and CHEM 365. Offered: Spring.

**CHEM 430 Advanced Biochemistry (3)**
Amplification of concepts in CHEM 350. LEC 3. Prereq: Grade of C- or better in CHEM 350. Offered: Spring.

**CHEM 440 Research/Internship (1, 2, 3, or 4)**
Research project or internship under supervision of a faculty member, with results presented in an acceptable paper. Course may be taken more than once for credit, but total credits may not exceed eight. Prereq: Permission of instructor. Offered: Every semester, with schedule arranged on an individual basis.

**CHEM 460W Senior Seminar (3)**
Capstone course. Includes research project selected by the student. LEC 3. Prereq: Senior standing. Offered: Spring.

# Classics

## Faculty

Stephen R. Todd, Chair, Professor
Douglas C. Clapp, Associate Professor
Shannon R. Flynt, Assistant Professor
P. Andrew Montgomery, Assistant Professor

## Undergraduate Programs and Requirements

| Majors | Minors |
|---|---|
| Classics | Classics |
| Greek | Greek |
| Latin | Latin |

The Department of Classics offers majors in classics, Greek, and Latin leading to a bachelor of arts degree. These majors provide students with the opportunity to pursue a course of study that covers a variety of Greek and Latin prose and poetry in the original languages, as well as the history and culture of the classical world and its importance for the 21st century. While the Greek major and the Latin major allow students to concentrate their undergraduate program around the mastery of a single language, the classics major encourages training in both Greek and Latin. Each of these majors would be an appropriate program of study to prepare a student for graduate study in classics or ancient history, but they are also designed for students pursuing a broad program of study as a background for graduate programs in the humanities and professional programs in fields such as medicine, dentistry, theology, and law. Likewise, a minor in classics, Greek, or Latin can strengthen the majors and degrees throughout the College of Arts and Sciences and the University by supporting and complementing the many disciplines that draw on the classics.

**University Core Curriculum and General Education Requirements**
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses.

## Courses

### CLASSICS

**CLAS 200 The Rediscovery of the Classical World (4)**
Exploration of the world of the Ancient Greeks and Romans. This course examines multiple aspects of Classical Antiquity through the eyes of those who rediscovered it in literary texts, in works of art and architecture, and in its material remains. It provides a broad and well-illustrated introduction to the history, literature, religion, and art and architecture of the Greeks and Romans. Offered: Spring.

**CLAS 204 The Artistic Legacy of Rome (2)**
Introduction to our artistic inheritance from the Roman world through a firsthand examination of the painting, sculpture, and architecture of Rome, including its Greek and Etruscan antecedents, and the Renaissance transformation of the Classical ideal. Offered: Jan Term-Study Abroad, on rotation.

**CLAS 303 Greece: The Crucible of Civilization (4)**
Examination of the history and culture of the Ancient Greeks through a first-hand look at the material remains, including monuments and artifacts from the Bronze Age, the Archaic and Classical periods, and the Hellenistic, Roman, and Christian eras. Offered: Jan Term-Study Abroad, on rotation.

**CLAS 304 Eternal Rome (4)**
Examination of the history and culture of Rome through a firsthand look at its material remains, including its Greek and Etruscan antecedents, the Republican and Imperial periods, and the Renaissance transformation of the Classical ideal. Offered: Jan Term-Study Abroad, on rotation.

## Classics Major

| Classics Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Classics Major:** | | **36** |
| **Classical Languages** | | **12** |
| (select three courses; one at 300 or 400 level) | | |
| GREK 201-454 | 4-12 | |
| LATN 201-454 | 4-12 | |
| **Classical History** | | **8** |
| HIST 421W Ancient Near East and Greece | 4 | |
| HIST 422W The Roman Republic and Empire | 4 | |
| **Classical Civilization** | | **8** |
| CLAS 200 Rediscovery of the Classical World | 4 | |
| CLAS 495W Senior Capstone: Research & Writing | 4 | |
| **Classical Electives** (select two courses) | | **8** |
| ART 381W History and Theory of Art I | 4 | |
| CLAS 303 Greece: The Crucible of Civilization | 4 | |
| CLAS 304 Eternal Rome | 4 | |
| CLAS 345 Varieties of Ancient Paganism from Alexander to Julian | 4 | |
| GREK 201-454 | 4-8 | |
| LATN 201-454 | 4-8 | |
| PHIL 301 History of Philosophy: Ancient & Medieval | 4 | |
| **General Electives** | | **28-40** |
| **Total Required Credits** | | **128** |

## Greek Major

| Greek Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Greek Major:** | | **32** |
| **Greek** (six courses at 200, 300 or 400 level) | | **24** |
| **History and Classics** | | **8** |
| HIST 421W Ancient Near East and Greece | 4 | |
| CLAS 495W Senior Capstone: Research & Writing | 4 | |
| **General Electives** | | **32-44** |
| **Total Required Credits** | | **128** |

## Latin Major

| Latin Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Latin Major:** | | **32** |
| **Latin** (six courses at 200, 300 or 400 level) | | **24** |
| **History and Classics** | | **8** |
| HIST 422W The Roman Republic and Empire | 4 | |
| CLAS 495W Senior Capstone: Research & Writing | 4 | |
| **General Electives** | | **32-44** |
| **Total Required Credits** | | **128** |

## Classics Minor

| Classics Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Classical Languages** (select one course) | | **4** |
| GREK 300-454 | 4 | |
| LATN 300-454 | 4 | |
| **Classical Electives** (select four courses) | | **16** |
| ART 381W History and Theory of Art I | 4 | |
| CLAS 200 Rediscovery of the Classical World | 4 | |
| CLAS 303 Greece: The Crucible of Civilization | 4 | |
| CLAS 304 Eternal Rome | 4 | |
| CLAS 345 Varieties of Ancient Paganism from Alexander to Julian | 4 | |
| GREK 201-454 | 4-16 | |
| LATN 201-454 | 4-16 | |
| HIST 421W Ancient Near East and Greece | 4 | |
| HIST 422W The Roman Republic and Empire | 4 | |
| PHIL 301 History of Philosophy: Ancient & Medieval | 4 | |
| **Total Required Credits** | | **20** |

## Greek Minor

| Greek Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Classical Languages** (select two courses) | | **8** |
| GREK 300-454 | 8 | |
| **Classical Electives** (select three courses) | | **12** |
| ART 381W History and Theory of Art I | 4 | |
| CLAS 200 Rediscovery of the Classical World | 4 | |
| CLAS 303 Greece: The Crucible of Civilization | 4 | |
| CLAS 345 Varieties of Ancient Paganism from Alexander to Julian | 4 | |
| GREK 201-454 | 4-12 | |
| LATN 201-454 | 4-12 | |
| HIST 421W Ancient Near East and Greece | 4 | |
| PHIL 301 History of Philosophy: Ancient & Medieval | 4 | |
| **Total Required Credits** | | **20** |

## Latin Minor

| Latin Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Classical Languages** (select two courses) | | **8** |
| LATN 300-454 | 8 | |
| **Classical Electives** (select three courses) | | **12** |
| ART 381W History and Theory of Art I | 4 | |
| CLAS 200 Rediscovery of the Classical World | 4 | |
| CLAS 304 Eternal Rome | 4 | |
| CLAS 345 Varieties of Ancient Paganism from Alexander to Julian | 4 | |
| GREK 201-454 | 4-12 | |
| LATN 201-454 | 4-12 | |
| HIST 422W The Roman Republic and Empire | 4 | |
| PHIL 301 History of Philosophy: Ancient & Medieval | 4 | |
| **Total Required Credits** | | **20** |

**CLAS 345 Varieties of Ancient Paganism from Alexander to Julian (4)**
Introduction to the major pagan religions of the Greco-Roman period, from the conquests of Alexander the Great (332 BCE) to the death of Julian the Apostate (363 CE). Some attention is paid to the pagan influences on emerging Judaism and Christianity. Co-listed as RELG 345. Offered: Spring, on rotation.

**CLAS 495W Senior Capstone: Research and Writing (4)**
Seminar exploring selected topics in classical antiquity. Includes a directed research project involving a research component, a writing component, and a public, oral presentation. For seniors, but juniors can take with permission. Prereq: 300-level Greek or Latin or permission. Offered: Fall.

## GREEK

**GREK 101 and 102 Elementary Greek I and II (4 each course)**
Introduction to Greek language and culture, aimed at developing the ability to read, understand, and interpret ancient Greek. Covers basic vocabulary and grammar of Classical Greek and provides foundation for the study of all ancient Greek literature, including the Greek New Testament. Offered: Fall (101); Spring (102).

**GREK 201 and 202 Intermediate Greek I and II (4 each course)**
Thematic reading in Greek texts with an emphasis on reading comprehension, a systematic review of grammar, and an introduction to tools for philological research. Prereqs: GREK 101 and 102, or permission. Offered: Fall (201); Spring (202).

**GREK 301 Homer (4)**
Introduction to the language and background of Greek epic, through selected readings from the Iliad and Odyssey, the earliest extant literature of the Western world. Through the careful study of these texts students further develop their ability to read, understand, and interpret ancient Greek. Prereq: GREK 202. Offered: Fall.

**GREK 302 Greek Historians (4)**
Selected readings from Herodotus and Thucydides. Through the careful study of these texts students further develop their ability to read, understand, and interpret ancient Greek. Includes survey of the development of Greek historiography. Prereq: GREK 202.

**GREK 303 Greek Tragedy (4)**
Selected readings from the plays of Sophocles and Euripides. Through the careful study of these texts students further develop their ability to read, understand, and interpret ancient Greek. Includes survey of the development of Greek drama. Prereq: GREK 202.

**GREK 351 Hellenistic Greek (4)**
Selected readings in Greek from the Hellenistic time period. Through the careful study of these texts students further develop their ability to read, understand, and interpret ancient Greek. Includes survey of the background and development of Hellenistic world. Prereq: GREK 202.

**GREK 401 Greek Lyric Poetry (4)**
Selected readings from the corpus of Greek Lyric Poetry. Through the careful study of these passages students further develop their ability to read, understand, and interpret ancient Greek. Includes survey of the background, development, and significance of the canon of Greek Lyric Poetry. Prereq: GREK 301 or GREK 303.

**GREK 450 Advanced New Testament Greek (4)**
Selected readings from the New Testament. Through the careful study of these passages students further develop their ability to read, understand, and interpret ancient Greek. Includes introduction to the study and practice of textual criticism.

**GREK 451, 452, 453, & 454 Directed Reading (1, 2, 3, & 4, respectively)**
Directed reading in selected Ancient Greek texts. Topics vary. May be repeated for credit. Prereq: Permission of the department chair.

## LATIN

**LATN 101 and 102 Elementary Latin I and II (4 each course)**
Introduction to the Latin language and culture, aimed at developing the ability to understand Latin through speaking, listening, reading, and writing. Offered: Fall (101) and Spring (102).

**LATN 201 and 202 Intermediate Latin I and II (4 each course)**
Thematic reading in Latin texts with an emphasis on reading comprehension, a systematic review of grammar, and an introduction to tools for philological research. Prereqs: LATN 101 and 102, placement, or permission. Offered: Fall (201) and Spring (202).

**LATN 301 Ovid (4)**
Selected readings from the works of Ovid. Through the careful study of these texts students further develop their ability to read, understand, and interpret Latin.

**LATN 302 Horace (4)**
Selected readings from the works of Horace. Through the careful study of these texts students further develop their ability to read, understand, and interpret Latin. Includes survey of the development of Roman Lyric Poetry.

**LATN 303 Cicero (4)**
Selected readings from the works of Cicero. Through the careful study of these texts students further develop their ability to read, understand, and interpret Latin.

**LATN 304 Vergil (4)**
Selected readings from the works of Vergil. Through the careful study of these texts students further develop their ability to read, understand, and interpret Latin. Includes survey of the development of Latin epic literature.

**LATN 451, 452, 453, & 454 Directed Reading (1, 2, 3, & 4, respectively)**
Directed reading in selected Latin texts. Topics vary. May be repeated for credit. Prereq: Permission of the department chair.

# Communication Studies

## Faculty

Rhonda G. Parker, Chair, Professor
David W. Chapman, Professor
Amanda W. Borden, Associate Professor
David R. Dedo, Associate Professor
Michael J. Janas, Associate Professor
Charlotte D. Brammer, Assistant Professor
Ryan W. Galloway, Assistant Professor and Director of Debate

## Undergraduate Programs and Requirements

**Major**
Communication Studies

**Minors**
Communication Studies
Writing

The Department of Communication Studies offers a bachelor of arts in communication studies. This comprehensive program offers courses in persuasion, rhetorical theory and criticism, argumentation, and public speaking that provide strategies for generating and delivering effective messages. In interpersonal, group, and organizational communication courses, students discover their communicative strengths and identify and address areas where improvement is needed. Students can tailor portions of the major to meet their special needs by choosing from a menu of communication electives in the junior and senior year. Students interested in majoring in language arts in preparation for teaching speech at the secondary school level should consult the Department of Teacher Education, School of Education section in this catalog for the curriculum.

The department also offers two minors: one in communication studies and one in writing. The communication studies minor consists of 20 credits and must include three upper-level courses. In the writing minor, students take 20 credits: three required 300-level courses and two 400-level electives.

Any communication studies major wishing to minor in writing must take a total of 60 hours in the department. The students must take COMS 354W (Creative Nonfiction), COMS 361W (Grammar for Writers), and three electives designated in the minor in addition to the major course requirements. In keeping with University policy, no course may be used for both the major and minor.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Communication studies students may not use COMS 205 (Intercultural Communication) to meet both the general education social science requirement and requirements for the major or minor.

### Communication Studies Minor

| Communication Studies Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Communication Studies Core** | | **8** |
| COMS 215 Oral Communication | 4 | |
| COMS 221 Interpersonal Communication | 4 | |
| **Communication Studies Electives**<br>Must be in upper-level courses. | | **12** |
| **Total Required Credits** | | **20** |

### Communication Studies Major

The bachelor of arts in communication studies is designed to teach students about human communication in its varied contexts and modes of expression. The goal of our program is to teach students to write, speak, listen, and think critically; adapt to a wide range of audiences and cultures; successfully manage personal relationships; work effectively in groups and organizations; and conduct independent research. Degree-seeking candidates must maintain a minimum overall GPA of 2.70.

| Communication Studies Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Communication Studies Major:** | | **36** |
| **Communication Studies Core** | | **24** |
| COMS 200 Introduction to Communication Studies | 4 | |
| COMS 215 Oral Communication | 4 | |
| COMS 221 Interpersonal Communication | 4 | |
| COMS 311W Rhetorical Criticism | 4 | |
| COMS 321W Research Methods in Communication | 4 | |
| COMS 491 Communication Workshop | 2 | |
| COMS 492 Senior E-Folio | 2 | |
| **Communication Studies Electives** (select three courses) | | **12** |
| COMS 319 Argumentation and Debate | 4 | |
| COMS 325 Small Group Communication | 4 | |
| COMS 354W Creative Nonfiction | 4 | |
| COMS 361W Grammar for Writers | 4 | |
| COMS 411W Public Address | 4 | |
| COMS 415 Persuasion | 4 | |
| COMS 417W Contemporary Rhetoric | 4 | |
| COMS 421 Advanced Interpersonal Communication | 4 | |
| COMS 424 Communication Internship* | 4 | |
| COMS 425W Communication Theory | 4 | |
| COMS 451W Organizational Communication | 4 | |
| COMS 453W Writing in the Professions | 4 | |
| COMS 455W Computer-Mediated Communication | 4 | |
| COMS 456 Directed Studies | 4 | |
| COMS 460W Language in Society | 4 | |
| **General Electives** | | **28-40** |
| **Total Required Credits** | | **128** |

*With advisor's approval only.

### Writing Minor

The writing minor allows students to study writing as a discipline, a means of self-expression, and an academic and professional tool. Students in the minor will understand the value of writing as a way of learning, develop effective composing strategies, and demonstrate expertise in written discourse for both traditional and electronic formats.

| Writing Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Writing Core** | | **12** |
| COMS 311W Rhetorical Criticism | 4 | |
| COMS 354W Creative Nonfiction | 4 | |
| COMS 361W Grammar for Writers | 4 | |
| **Writing Electives** (select two courses) | | **8** |
| COMS 417W Contemporary Rhetoric | 4 | |
| COMS 424 Communication Internship | 4 | |
| COMS 451W Organizational Communication | 4 | |
| COMS 453W Writing in the Professions | 4 | |
| COMS 455W Computer-Mediated Communication | 4 | |
| COMS 456 Directed Studies | 4 | |
| COMS 460W Language in Society | 4 | |
| **Total Required Credits** | | **20** |

## Courses

**COMS 200 Introduction to Communication Studies (4)**
Overview of elements of the communication discipline, focusing on major theories, models, and skills that form the foundation for communication studies. Emphasis on theory, research, and development of competency in interpersonal, group, and public communication contexts.

**COMS 205 Intercultural Communication (4)**
Study of intercultural communication, focusing on the concepts and applications of its central theories. Through readings and projects, students will analyze various uses of communication within cultures as a way of developing practical knowledge and skill in communicating across cultures. Offered: Fall.

**COMS 215 Oral Communication (4)**
Study of techniques of giving speeches to inform, convince, and actuate. Includes speech composition, delivery, and audience analysis, plus an overview of the basic elements of business communication, such as interviews.

**COMS 221 Interpersonal Communication (4)**
Examination of interpersonal communication in human relationships and development of skills through projects, experiments, readings, and participation. A valuable course in terms of learning to understand and be understood by others.

**COMS 311W Rhetorical Criticism (4)**
Examination of the tradition of rhetorical criticism from the Greeks to the present. As part of the historical and philosophical study, students are encouraged to familiarize themselves with a variety of critical perspectives for studying public discourse. Offered: Fall.

**COMS 319 Argumentation and Debate (4)**
Analysis, comprehension, and presentation of public arguments as practiced in law, politics, science, and other public areas. Roughly equal attention is given to argument theory and practice, with the goal of helping students develop skills in the use of critical evaluation of reasoning, evidence, and the construction of arguments. Offered: Fall.

**COMS 321W Research Methods in Communication (4)**
Analysis and research in the communication discipline. Emphasis placed on empirical, scientific methods of investigation in the field of communication. Students are required to apply knowledge by conducting an original research project. Prereq: COMS 200. Offered: Spring.

**COMS 325 Small Group Communication (4)**
Examination of perspectives that define the communication discipline's study of small-group communication. Once exposed to the theoretical material, students are encouraged to use the theoretical concepts and principles to resolve problems that may arise in group settings. Prereq: COMS 215. Offered: Fall.

**COMS 354W Creative Nonfiction (4)**
Development of advanced writing techniques, including an understanding of form, genre, and rhetorical purpose (e.g., the personal essay, nature writing, religious/inspirational writing, proposal). Offered: Spring.

**COMS 361W Grammar for Writers (4)**
Examination of how grammar can enhance written communication. Students will analyze how grammar is used as a rhetorical tool and will demonstrate effective control of written grammar through exercises and writing practice. Offered: Fall.

**COMS 410 Intercollegiate Debate (1)**
Study of intercollegiate debate theories, procedures, and teaching. Designed for students participating in the Samford University Debate team.

**COMS 411W Public Address (4)**
Examination of the history of the many forms and channels of public address, from the Classical period to the present, in order to establish the unique qualities of democratic traditions. Prereqs: COMS 215 and COMS 311W. Offered: Spring.

**COMS 415 Persuasion (4)**
Analysis of various theories of persuasion as decision-making tools in a democratic society with emphasis on factors such as attention, perception, needs, values, credibility, winning belief, and ethics. Prereq: COMS 215 or equivalent, or permission of the instructor. Offered: Spring.

**COMS 417W Contemporary Rhetoric (4)**
Examination of specific contemporary rhetoric situations, focusing on the role of communication in the public sphere. Employs critical, cultural, and rhetorical studies to focus on the interrelationship between the mass media and politics. Offered: Spring.

**COMS 421 Advanced Interpersonal Communication (4)**
Examination of the theories of interpersonal communication, their various components, and their practical manifestations. Emphasis on research and theory in the field of interpersonal communication, enabling students to approach the discipline at an advanced pre-professional level. Prereq: COMS 221 or equivalent, or permission of the instructor. Offered: Spring.

**COMS 424 Communication Internship (4)**
Independent study in which students gain practical experience while working in a business, industry, or not-for-profit venue. Includes opportunities in advertising, public relations, journalism, radio, television, museums, and religious or philanthropic organizations. Prereq: Declared major or minor in communication studies; must meet eligibility requirements.

**COMS 425W Communication Theory (4)**
Examination of major paradigms, theories, and perspectives informing the study of human communication. Exploration of underlying assumptions of the various world views and theoretical perspectives. Provides a strong working vocabulary and familiarity with communication principles and lays a foundation for graduate or professional pursuits. Prereq: COMS 221 or equivalent, or permission of instructor. Offered: Spring.

**COMS 451W Organizational Communication (4)**
Exploration of how communication affects various stakeholders within organizations. After identifying key concepts in organizational theory, students are expected to analyze and evaluate organizational communication through case studies. Prereq: UCCA 102, junior standing. Offered: Spring, on rotation.

**COMS 453W Writing in the Professions (4)**
Study of theories and research of rhetorical strategies as practiced in various professional discourse communities. Applications of theory are made to a number of writing contexts, including business and technical communication. Offered: Fall, on rotation.

**COMS 455W Computer-Mediated Communication (4)**
Advanced study of theory and practice of both print and screen literacies. Students will demonstrate an understanding of computer-mediated communication through examinations as well as a digital portfolio. Offered: Spring, on rotation.

**COMS 456 Directed Studies (1-4)**
Guided examination of a specialized topic leading to a major paper, oral presentation, and/or other assignment. Prereq: Permission of the instructor.

**COMS 460W Language in Society (4)**
Study of socio- and psycho-linguistic principles and issues in contemporary society. Topics may include language and gender, language in the media, power and politics in language, linguistic variety in North America, and others. Prereqs: UCCA 102, Junior standing. Offered: Spring, on rotation.

**COMS 491 Communication Workshop (2)**
Integration of knowledge and experience gleaned from lower-level communication studies' courses in a capstone experience resulting in an applied communication project. Prereqs: COMS 311W, COMS 321, and senior standing. Offered: Fall.

**COMS 492 Senior E-Folio (2)**
Reflection and synthesis of knowledge and experience gleaned from the communication studies' curriculum leading to the creation of an electronic portfolio in which students demonstrate proficiency in oral communication, written communication, information literacy, and quantitative literacy. Prereqs: COMS 311W, COMS 321, and senior standing. Offered: Spring.

# English

## Faculty

Nancy M. Whitt, Chair, Professor
J. Roderick Davis, Professor
Christopher Metress, Professor
Charles T. Workman, Professor
J. Mark Baggett, Associate Professor
Steven Epley, Associate Professor
Rosemary M. Fisk, Associate Professor
Julie Sims Gustafson, Associate Professor
N. Jane Hiles, Associate Professor
Bryan M. Johnson, Associate Professor

## Undergraduate Programs and Requirements

### Majors

English
English with a Concentration in Film Studies

### Minor

English

The Department of English offers a major in English and a major in English with a concentration in film studies, both leading to a bachelor of arts degree. The department also offers a minor in English.

**University Core Curriculum and General Education Requirements**
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. English majors and minors cannot use ENGL 205 (Fiction and Film) to meet the general education humanities requirement.

### English Major with a Concentration in Film Studies

| English Major with Film Studies Concentration Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **English Major with Film Studies Concentration:** | | | **44** |
| **Film Studies Core** | | | **36** |
| ENGL 210 | American Literature | 4 | |
| ENGL 301W | British Literature to 1798 | 4 | |
| ENGL 302 | British Literature since 1798 | 4 | |
| ENGL 307W | Film | 4 | |
| ENGL 310W | Approaches to Literature | 4 | |
| ENGL 331W | Film History | 4 | |
| ENGL 340W | Shakespeare | 4 | |
| ENGL 410W | Senior Thesis* | 4 | |
| ENGL 420 | Capstone: Comparative Literature* | 4 | |
| **Film Studies Electives** (select eight hours) | | | **8** |
| ENGL 205 | Fiction and Film | 4 | |
| ENGL 300W | Creative Writing | 4 | |
| ENGL 332W | Major Auteurs | 4 | |
| HIST 308 | Contemporary America: Media & Politics | 4 | |
| JMC 362 | The Film Genre | 2 | |
| JMC 364 | Film Criticism | 2 | |
| POLS 355 | Politics in Film | 4 | |
| THEA 414 | Playwriting | 4 | |
| **General Electives** | | | **20-32** |
| | | **Total Required Credits** | **128** |

*ENGL 410W (Senior Thesis) must be taken in the fall semester of the senior year; ENGL 420 (Capstone) must be taken in the spring semester of the senior year.

### English Major

The courses listed below are designed to give students both depth and breadth in English literary studies. Students learn the works of individual authors and genres as well as broad literary movements. They demonstrate their ability to research and analyze literature in depth by writing a senior thesis while demonstrating their breadth of knowledge of literature through an oral exam that covers the entire major. The thesis is written during the first semester of their senior year; oral examinations are taken during the last semester of their senior year.

| English Major Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **English Major:** | | | **44** |
| **English** | | | **28** |
| ENGL 210 | American Literature | 4 | |
| ENGL 301W | British Literature to 1798 | 4 | |
| ENGL 302 | British Literature since 1798 | 4 | |
| ENGL 310W | Approaches to Literature | 4 | |
| ENGL 340W | Shakespeare | 4 | |
| ENGL 410W | Senior Thesis* | 4 | |
| ENGL 420 | Capstone: Comparative Literature* | 4 | |
| **Literary Forms** (select one course) | | | **4** |
| ENGL 300W | Creative Writing *or* | 4 | |
| ENGL 303W | Poetry *or* | 4 | |
| ENGL 304W | Short Story *or* | 4 | |
| ENGL 305 | Novel *or* | 4 | |
| ENGL 306W | Drama *or* | 4 | |
| ENGL 307W | Film | 4 | |
| **Literature in its Own Time** (select two courses) | | | **8** |
| ENGL 308 | American Literary Movements *or* | 4 | |
| ENGL 320W | Medieval to 1485 *or* | 4 | |
| ENGL 321 | Renaissance 1485-1660 *or* | 4 | |
| ENGL 322W | Restoration and 18th Century *or* | 4 | |
| ENGL 323W | Romantic *or* | 4 | |
| ENGL 324W | American Renaissance *or* | 4 | |
| ENGL 325W | Victorian *or* | 4 | |
| ENGL 326 | 20th Century Britain *or* | 4 | |
| ENGL 327W | 20th Century American *or* | 4 | |
| ENGL 328W | Minority Literature | 4 | |
| **English Elective (300-400 level)** | | | **4** |
| **General Electives** | | | **20-32** |
| | | **Total Required Credits** | **128** |

*ENGL 410W (Senior Thesis) must be taken in the fall semester of the senior year; ENGL 420 (Capstone) must be taken in the spring semester of the senior year.

### English Minor

| English Minor Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **English** | | | **20** |
| ENGL 210 | American Literature | 4 | |
| ENGL 301W | British Literature to 1798 | 4 | |
| ENGL 302 | British Literature since 1798 | 4 | |
| ENGL 340W | Shakespeare | 4 | |
| English Elective (300-400 level) | | 4 | |
| | | **Total Required Credits** | **20** |

## Courses

**ENGL 200 Literary London (4)**
Exploration of classic British literature in conversation with later re-tellings, and their translations into theatre and film, using contextual perspectives. Limited to students enrolled in Jan Term at Samford's Daniel House London Study Centre. Offered: Jan Term.

**ENGL 205 Fiction and Film (4)**
Study of the formal analysis of literary texts and films. Course includes close readings of literature and film in contexts (i.e., cultural, historical, biographical, economic, political) that inform and are shaped by them. Offered: Fall and Spring

**ENGL 210 American Literature (4)**
Introduction to the principles and practices of literary interpretation, research methodology, and other skills and terminology essential to the discipline through a chronological study of American literature. Offered: Fall and Spring.

**ENGL 300W Creative Writing (4)**
Survey of styles, techniques, and trends in current fiction and poetry with emphasis placed on learning the craft of imaginative writing. Can be counted as a Literary Form course. Prereqs: UCCA 101, UCCA 102, and ENGL 205 or ENGL 210. Offered: Fall.

**ENGL 301W British Literature to 1798 (4)**
Chronological study of British literature from Beowulf to the end of the eighteenth century, using the principles and practices of literary interpretation, research methodology, and other skills and terminology essential to the discipline. Offered: Fall.

**ENGL 302 British Literature since 1798 (4)**
Chronological study of British literature from the Romantic period to the present day, using the principles and practices of literary interpretation, research methodology, and other skills and terminology essential to the discipline. Offered: Spring.

**ENGL 303W-307W Literary Forms (4 each course)**
Examination of various literary genres (poetry, the short story, the novel, drama, and film). Investigation of each genre's representative texts and multiple practitioners in order to deepen competencies in interpreting literature and evaluating secondary sources. Also covered are major developments within the genre. Includes introduction to canon issues through examination of classical and non-classical, canonical and noncanonical, and multicultural literature. Offered: One genre course every semester.

**ENGL 300W Creative Writing** (see description above)
**ENGL 303W Poetry**
**ENGL 304W Short Story**
**ENGL 305 Novel**
**ENGL 306W Drama**
**ENGL 307W Film**

**ENGL 308 American Literary Movements (4)**
Examination of major American literary movements. Investigation of representative texts in order to broaden understanding of the scope of American literary history. Prereqs: UCCA 101, UCCA 102, and ENGL 210.

**ENGL 309 Special Topics in Literature (4)**
Study of literary movements and/or particular thematic issues selected on the basis of student interest and faculty expertise. Cannot be used as a substitute for the general education humanities requirement. Prereqs: Completion of University Core Curriculum. Offered: As needed.

**ENGL 310W Approaches to Literature (4)**
Overview of the history, methodologies, and ideologies of literary and critical theory. In-depth study of contemporary critical methodologies affords students the opportunity to gain confidence in their own critical thinking and writing about literature. Prereq: ENGL 210. Offered: Spring.

**ENGL 320W-328W Literature in Its Own Time (4 each course)**
Survey of literature from a particular period, including study of historical, intellectual, and social backgrounds while focusing on the literary forms and conventions characteristic of the era. English majors must complete two courses from this category. Offered: One period literature course every semester.

**ENGL 308 American Literary Movements** (see description at left)
**ENGL 320W Medieval to 1485**
**ENGL 321 Renaissance 1485-1660**
**ENGL 322W Restoration and 18th Century**
**ENGL 323W Romantic**
**ENGL 324W American Renaissance**
**ENGL 325W Victorian**
**ENGL 326 20th Century British**
**ENGL 327W 20th Century American**
**ENGL 328W Minority Literature**
Readings from various American ethnic fiction writers and poets. Secondary Education-English/Language Arts majors may substitute Minority Literature for ENGL 420W Capstone. Offered: Jan Term.

**ENGL 330 Junior Seminar (4)**
In-depth study of the work of a single author or exploration of a special topic. Offered: As needed.

**ENGL 331W Film History (4)**
Examination of the historical development of film, combining textual and visual media to study film as a major art form. Includes major developments in film techniques, readings on historical periods and major auteurs, and analysis of specific films. Prereq: ENGL 205. Offered: As needed.

**ENGL 332W Major Auteurs (4)**
Exploration of the work of one or more major film directors. Examines a representative sample of films, emphasizing formal cinematic analysis and survey of critical literature. Offered: As needed.

**ENGL 333 Internship (4)**
Learning experience for advanced students working under the supervision of qualified professionals in an academic or business setting. Prereqs: Junior standing or above, 12 credits of English courses, and permission of the instructor. Offered: As needed.

**ENGL 340W Shakespeare (4)**
Close reading of Shakespearean comedies, tragedies, histories, and romances, emphasizing formalist and theoretical analyses.

**ENGL 400W History of the Language (4)**
Investigation of the theory, background, and development of the English language. Offered: As needed.

**ENGL 410W Senior Thesis (4)**
Directed-study project focused on the development of an original thesis, derived from research begun in the junior-level class. Project combines research skills and the student's own critical analysis. Evaluated by external examiners and presented orally. Prereqs: ENGL 310W and substantial paper from a junior-level class to be developed into a senior thesis. Offered: Fall.

**ENGL 420 Capstone: Comparative Literature (4)**
Readings of literature in translation from various cultures and times, situating them in the professional context of the discipline. Course includes comprehensive oral examination on English and American literature. Offered: Spring.

# Geography

## Faculty

Eric J. Fournier, Chair, Associate Professor
R. Maxwell Baber, Associate Professor
Jennifer L. Rahn, Assistant Professor

## Undergraduate Programs and Requirements

**Major**
Geography

**Minors**
Traditional Geography
Certificate in Geographic Information Science
Latin American Studies*

### Interdisciplinary Concentrations

Environmental Science/Geographic Information Systems (EGIS)
Latin American Studies*

The Department of Geography offers a major in geography and an interdisciplinary concentration in environmental science and geographic information systems (EGIS), both leading to a bachelor of science degree. The department also offers a traditional geography minor and a certificate in geographic information science.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Geography majors and minors cannot use geography to satisfy the general education social science requirement. ECON 201 (Principles of Macroeconomics) is the general education social science requirement for the EGIS concentration.

*See the History or World Languages and Cultures sections for details on the Latin American studies minor and interdisciplinary concentration.

### Geography Major

| Geography Major Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **Geography Major:** | | | **45** |
| **Geography** | | | **17** |
| GEOG 101 | World Regional Geography | 4 | |
| GEOG 214 | Physical Geography | 4 | |
| GEOG 216 | GIS I: Digital Mapping | 4 | |
| GEOG 299 | The Craft of Geography | 1 | |
| GEOG 499W | Senior Seminar | 4 | |
| **Geography Systematic Courses** (select two courses) | | | **8** |
| GEOG 305 | Economic Geography | 4 | |
| GEOG 360 | Urban Geography | 4 | |
| GEOG 490 | Special Topics in Geography | 4 | |
| **Geography Regional Courses** (select two courses) | | | **8** |
| GEOG 391 | US and Canada: A Regional Geography | 4 | |
| GEOG 392W | Africa: Land and People | 4 | |
| GEOG 393 | Europe: Land and People | 4 | |
| GEOG 395 | Asia: Land and People | 4 | |
| GEOG 396 | Latin America: Land and People | 4 | |
| **Geography Applied Courses** (select two courses) | | | **8** |
| GEOG 270 | GIS II: Spatial Analysis | 4 | |
| GEOG 300 | Remote Sensing | 4 | |
| GEOG 371 | Multimedia Cartography | 4 | |
| GEOG 405 | GIS Project Management | 4 | |
| **Geography Elective** (any 300-400 level geography course) | | | **4** |
| **General Electives** | | | **19-31** |
| | **Total Required Credits** | | **128** |

### Environmental Science/Geographic Information Systems (EGIS) Interdisciplinary Concentration

The EGIS interdisciplinary concentration is offered jointly by the biology and geography departments with use of the geography department's GIS facilities. Students in this unique program combine the fields of environmental and field biology with the technical fields of remote sensing, computer mapping, and GIS. University core curriculum and general education requirements for the EGIS interdisciplinary concentration are the same as those for the geography major with one exception: ECON 201 (Economics I-Macro) is the general education social science requirement.

| EGIS Interdisciplinary Concentration Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements:** | | | **42-54** |
| **Natural and Computational Sciences:** | | | **16** |
| **Chemistry** | | **12** | |
| CHEM 205/206 | Foundations of Chemistry w/Lab | 4 | |
| CHEM 215/216 | Fundamentals of Org Chem w/Lab | 4 | |
| CHEM 315/316 | Organic Reactions and Mech w/Lab | 4 | |
| **Physics** | | **4** | |
| PHYS 100 | Physics for Society | 4 | |
| **Social Sciences** | | | **4** |
| ECON 201 | Principles of Macroeconomics | 4 | |
| **Mathematics** | | | **8** |
| MATH 110 | Contemporary Math | 4 | |
| MATH 210 | Elementary Statistics | 4 | |
| **World Languages** | | | **4-16** |
| **Fine Arts** | | | **4** |
| **Humanities** | | | **4** |
| **Physical Activity** | | | **2** |
| **EGIS Interdisciplinary Concentration:** | | | **60** |
| **Biology** | | | **36** |
| BIOL 203 | Foundations of Biology I | 4 | |
| BIOL 204 | Foundations of Biology II | 4 | |
| BIOL 325 | General Microbiology | 4 | |
| BIOL 326<br>BIOL 436 | Environmental Science *or*<br>Ecology | 4 | |
| BIOL 333 | Genetics | 4 | |
| BIOL 403 | Invertebrate Field Zoology | 4 | |
| BIOL 416 | Vertebrate Field Zoology | 4 | |
| BIOL 422 | Plant Taxonomy and Local Flora | 4 | |
| BIOL 438W | Biology Seminar | 4 | |
| **Geography** | | | **24** |
| GEOG 214 | Physical Geography | 4 | |
| GEOG 216 | GIS I: Digital Mapping | 4 | |
| GEOG 270 | GIS II: Spatial Analysis | 4 | |
| GEOG 300 | Remote Sensing | 4 | |
| GEOG 371 | Multimedia Cartography | 4 | |
| GEOG 405 | GIS Project Management | 4 | |
| **General Electives** | | | **0-4** |
| | **Total Required Credits** | | **128-136** |

## Geography Minors

The geography department strongly recommends that students select a minor. For students other than geography majors, the department offers two options: the traditional minor for students seeking one to complement history, political science, international relations, public administration, education, or other disciplines and programs; and a certificate in geographic information science for students interested in GIS technology. The latter is suitable for business administration, the natural sciences, math, or computer science.

## Traditional Geography Minor

| Traditional Geography Minor<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Geography Core** | | | **9** |
| GEOG 101 | World Regional Geography | 4 | |
| GEOG 214 | Physical Geography | 4 | |
| GEOG 299 | The Craft of Geography | 1 | |
| **Geography Electives**<br>(select three upper-level geography courses) | | | **12** |
| | | **Total Required Credits** | **21** |

## Certificate in Geographic Information Science*

| Certificate in Geographic Information Science<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Geography** | | | **25-29** |
| GEOG 214 | Physical Geography | 4 | |
| GEOG 216 | GIS I: Digital Mapping | 4 | |
| GEOG 270 | GIS II: Spatial Analysis | 4 | |
| GEOG 299 | The Craft of Geography | 1 | |
| GEOG 300 | Remote Sensing | 4 | |
| GEOG 371 | Multimedia Cartography | 4 | |
| GEOG 405 | GIS Project Management | 4 | |
| *GEOG 460* | *Geography Internship (recommended)* | *4* | |
| | | **Total Required Credits** | **25-29** |

*****Prerequisites for the certificate are: COSC 110, MATH 150, and MATH 210.

## Courses

**GEOG 101 World Regional Geography (4)**
Introduction to the world's major regions, focusing on factors which give these regions their distinctive character. Such factors are derived from complex interrelationships between the pattern of human activity and the physical landscape within any given region. Adopts National Geography Standards (1994) as basis for geographic understanding.

**GEOG 214 Physical Geography (4)**
Introduction to components of the earth's surface environment. Emphasis on the structure and dynamic nature of landform features and processes, and on mechanics of the earth's atmosphere, including the study of meteorological principles and climatological patterns. Offered: Fall and Spring.

**GEOG 216 GIS I: Digital Mapping (4)**
An introduction to theory and use of digital maps in Geographic Information Science (GISc). Topics include map projections and coordinate systems, vector and raster data models, vector data input and editing, attribute data input and management, and map output. Offered: Spring.

**GEOG 270 GIS II: Spatial Analysis (4)**
Extended exploration into theory and concepts of Geographic Information Science (GISc), focusing on analytical operations. Topics includes vector data query, feature measurement, map overlay, feature buffering, raster data analysis, terrain mapping, spatial interpolation, spatial modeling, and network analysis. Prereq: GEOG 216. Offered: Fall.

**GEOG 299 The Craft of Geography (1)**
Overview of the geography discipline, including definition of various components that make up this interdisciplinary academic field. Through lectures, readings, and hands-on experiments, students are introduced to the traditional and new techniques which spatial analysis, used by geographers, incorporates into problem-solving in an increasingly complex world. Offered: Fall.

**GEOG 300 Remote Sensing (4)**
Introduction to remote-sensing principles and applications in various fields. Includes how the electromagnetic spectrum interacts with the earth to create the visible world. Instruction in the interpretation of aerial photographs and an introduction to active (Radar) and passive (Earth Observation Satellite) sensor systems. Offered: Fall, on rotation.

**GEOG 301 Independent Study (4)**
Directed reading and research on a selected topic in geography designed to give preparation in special areas not fully covered in regular course offerings. May be repeated once. Prereqs: Junior standing, permission of the instructor, and geography major/minor status. Offered: Fall and Spring.

**GEOG 305 Economic Geography (4)**
Geographic examination of the world's economy. Topics include global patterns of production and distribution, economic development, transportation, location analysis, and the globalization of the world's economic systems. Offered: Spring, on rotation.

**GEOG 360 Urban Geography (4)**
Geographic perspective of the past, present, and future of the American city. Topics include the historic roots of cities, development of the U.S. urban system, transportation, and the shaping of cities; social, political, and economic dynamics of urban areas; urban growth, decline, and revitalization; suburbanization; and challenges facing cities in the twenty-first century. Co-listed as POLS 360 and SOCI 360. Offered: Spring, on rotation.

**GEOG 371 Multimedia Cartography (4)**
Focus on statistical information design, particularly as related to the display and representation of geographic data. Multimedia output will involve both print and electronic formats, to include experience developing interactive and animated map products. Prereq: GEOG 216 and GEOG 270. Offered: Spring.

**GEOG 391 United States and Canada: A Regional Geography (4)**
Exploration of the geography of the U.S. and Canada, including analysis of physical, cultural, economic, and political landscapes. Emphasis on the importance of the two countries as a center of world economic power. Co-listed as HIST 391. Offered: On rotation.

**GEOG 392W Africa: Land and People (4)**
Regional exploration of the entire African continent, focusing on the physical structure, cultural patterns, population distribution, political evolution, resource bases, and economic activities which give character to the continent. Co-listed as POLS 392W. Offered: On rotation.

**GEOG 393 Europe: Land and People (4)**
In-depth analysis of landforms, and cultural, political, and economic factors which shape the character of the region. Co-listed as HIST 393 and POLS 393. Offered: On rotation.

**GEOG 395 Asia: Land and People (4)**
Regional analysis of the Asian continent focusing on the spatial patterns of physical structure, culture, environment, history, and politics which characterize the region. Co-listed as HIST 395 and POLS 395. Offered: On rotation.

**GEOG 396 Latin America: Land and People (4)**
Regional exploration of Latin America, focusing on the cultural, historical, environmental, economic, and political spatial patterns that give character to the region. Co-listed as POLS 396. Prereq: Junior standing or demonstration of academic maturity. Offered: On rotation.

**GEOG 405 GIS Project Management (4)**
Development of GIS projects with emphasis on organizational management and software customization. Includes exploration of computer programming and scripting languages for enhanced geoprocessing capabilities. Prereq: GEOG 216 and GEOG 371. Offered: Fall.

**GEOG 460 Geography Internship (4)**
Internships in governmental agencies, corporations, and industry under supervision of the department. Can be repeated once, but only one internship can count toward the major. Offered: Fall and Spring.

**GEOG 490 Special Topics in Geography (4)**
Special topics in geography that are not normally examined in depth in the regular course offerings. Focus on research interests of faculty members, newly emerging areas of interest in geography, or current events. Courses may be offered by visiting faculty or as experimental advanced courses by departmental faculty. Prereq: Junior class standing or permission of department chair.

**GEOG 499W Senior Seminar (4)**
Specialized course intended as a synthesizing experience for the major. Course is required for graduation and consists of an independent research project in a subfield specialty involving a research component, a writing component, and a public, oral presentation of research results. A minimum grade of C is required to pass this course. Offered: Fall.

# History

## Faculty

John Mayfield, Chair, Professor
James S. Brown, Jr., Professor
Ginger S. Frost, Professor
Marlene H. Rikard, Professor
S. Jonathan Bass, Associate Professor
Barry M. Robinson, Assistant Professor
W. Jason Wallace, Assistant Professor
William B. Womack, Assistant Professor

## Undergraduate Programs and Requirements

### Major
History

### Minors
History
Latin American Studies

### Interdisciplinary Concentrations
Asian Studies
International Relations
Latin American Studies

The Department of History offers a major and minor in history and, in cooperation with other departments, offers interdisciplinary concentrations in Asian studies, international relations, and Latin American studies. History course offerings also fulfill requirements for minors in Asian studies; Christianity, women, and leadership studies (CWLS); and Latin American studies. All history majors and interdisciplinary concentrations earn a bachelor of arts degree. The history department offers several scholarships and awards to history majors. For more information, students should contact the departmental office.

Students who plan to teach at the secondary school level may obtain a B.A. in history with teacher certification through the College of Arts and Sciences or major in history/social science, leading to a bachelor of science in education degree, from the School of Education.

### University Core Curriculum and General Education Requirements
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. History majors and minors, and students in the international relations interdisciplinary concentration, cannot use HIST 200 (The West in Global Perspective) to meet the general education humanities requirement.

## History Major

A history major prepares students for a broad range of careers in business, education, religion, communications, government service (both domestic and foreign), and other professions. It is excellent preparation for graduate study in history and for professional schools such as business administration and law. As a traditional major for students planning legal careers, the department offers students a strong background in western and non-western institutions and values.

The major also provides subject preparation for those seeking a career in education. History majors who wish to obtain certification for secondary teaching must meet additional requirements through the Orlean Bullard Beeson School of Education and Professional Studies. The student's degree affiliation remains in Arts and Sciences, and he or she must meet all University core curriculum and general education requirements imposed by the bachelor of arts.

| History Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **History Major:** | | **44** |
| **I. Foundations** | | **16** |
| HIST 200 The West in Global Perspective | 4 | |
| HIST 217 Early America to 1877 | 4 | |
| HIST 218 Modern America since 1865 | 4 | |
| HIST 300W The Historian's Craft | 4 | |
| **II. Advanced Surveys and Special Studies*** | | **24** |
| Select six upper-division courses at the 300- *or* 400-level. Excludes HIST 495 and HIST 497. | 24 | |
| **III.Capstone**** | | **4** |
| HIST 495W Senior Seminar *or*<br>HIST 497 Independent Research | 4 | |
| **General Electives** | | **20-32** |
| **Total Required Credits** | | **128** |

* With some exceptions, 300-level courses are European and American period courses; 400-level courses are normally area studies or topical courses. Students should consult with their advisors to achieve a suitable balance of 300- and 400-level courses.

** A history major is expected to enroll in a Senior Seminar (HIST 495W). With permission of the instructor and department chair, a student with a special project may substitute Independent Study (HIST 497) for this requirement.

## Asian Studies Interdisciplinary Concentration

Through an intercampus exchange program, the Birmingham Area Consortium for Higher Education (BACHE), students may obtain an interdisciplinary concentration or minor in Asian studies. The curriculum provides preparation for graduate school in several disciplines or for work in such diverse fields as government service, international business, marketing, and journalism.

| Asian Studies<br>Interdisciplinary Concentration<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements*** | | **30-42** |
| **Asian Studies Interdisciplinary Concentration:** | | **40** |
| **Asian Studies** | | **4** |
| HIST 463 Monsoon Asia: Survey of Cultural History | 4 | |
| **History Electives**<br>(East Asia, South-Southeast Asia courses**) | | **24** |
| HIST 395 Asia: Land and People | 4 | |
| HIST 441 History of China to 1644 | 4 | |
| HIST 442 History of China since 1644 | 4 | |
| HIST 443 History of Modern Japan | 4 | |
| HIST 444 Asia's Response to the West | 4 | |
| HIST 456 Vietnam: An American Watershed | 4 | |
| **Asian Studies Electives** | | **12** |
| 12 additional credits (approximately 3 courses) approved by the department | 12 | |
| **General Electives** | | **24-36** |
| **Total Required Credits** | | **128** |

* Samford University requires 30-42 credits depending upon language placement. In this major, the general education language requirement can only be satisfied by an Asian language. Samford University offers at least two years of Chinese, Hindi, Japanese, and Thai; see the Department of World Languages and Cultures section of this catalog for a description of the Critical Languages Program.

**24-32 credits maximum in one area; 4 credits minimum required in second area.

## International Relations Interdisciplinary Concentration

The concentration in international relations is an interdisciplinary program, offered cooperatively by the departments of history, political science, and world language and cultures for students interested in foreign affairs or international service; business or other institutions with international dimensions; international law; or graduate education in international relations, history, or political science. For specific details on course options, see the Department of Political Science section of this catalog.

| International Relations Interdisciplinary Concentration<br>Required Courses | Total Required Credits |
|---|---|
| **University Core Curriculum** | **22** |
| **General Education Requirements** | **30-42** |
| **IREL Interdisciplinary Concentration:** | **68-76** |
| **Economics** | **4** |
| **World Language** | **16** |
| **History** | **20** |
| **Political Science** | **20** |
| **Recommended Electives*** | **8-16** |
| **General Electives** | **0-8** |
| **Total Required Credits** | **128-140** |

*Eight to 16 foreign language credits are recommended.
This option gives students the equivalent of a foreign language major.

## Latin American Studies Interdisciplinary Concentration

The bachelor of arts in Latin American studies, a joint program with the departments of geography, history, political science, and world languages and cultures, is intended to teach students about the rich civilizations in the portions of North, Central, and South America and the Caribbean known as Latin America. Through emphasis on the Spanish language and an interdisciplinary approach to the region, students will obtain a nuanced and deep understanding of Latin America. For details on required courses and options, see the Department of World Languages and Cultures section of this catalog.

| Latin American Studies Interdisciplinary Concentration Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Latin American Studies Interdisciplinary Concentration:** | | **52** |
| **I. Language** | | **16** |
| PORT 101 Elementary Portuguese I | 4 | |
| PORT 102 Elementary Portuguese II | 4 | |
| SPAN 301W Conversation/Composition/Grammar | 4 | |
| SPAN 302W Conversation/Composition/Reading | 4 | |
| **II. Interdisciplinary Course** | | **4** |
| LAST 201 Introduction to Latin American Studies | 4 | |
| **III. Discipline-Based Courses:** | | **20** |
| **A. Social Science** (choose two) | | |
| Geography: GEOG/POLS 396 Latin America: Land/People | 4 | |
| History: HIST 461W Latin American History | 4 | |
| Political Science: POLS 322 Latin American Politics | 4 | |
| **B. Literature** (choose one) | | |
| SPAN 403W Spanish American Literature I | 4 | |
| SPAN 404W Spanish American Literature II | 4 | |
| SPAN 405W Special Topics* | 4 | |
| SPAN 406W Special Topics* | 4 | |
| **C. Civilization/Culture** (choose two) | | |
| LAST 380 Latin American Studies Seminar | 4 | |
| SPAN 316 Latin American Culture I | 4 | |
| SPAN 317 Latin American Culture II | 4 | |
| **IV. Study Abroad in Latin America** (select one of the following): | | **4** |
| BIOL 340 Amazon Rain Forest | 4 | |
| PORT 351 Language Study Abroad: Adv Port I | 4 | |
| PORT 352 Language Study Abroad: Adv Port II | 4 | |
| PORT 353 Language Study Abroad: Cultural Stdies I | 4 | |
| PORT 354 Language Study Abroad: Cultural Stdies II | 4 | |
| SPAN 351 Language Study Abroad: Adv Spanish I | 4 | |
| SPAN 352 Language Study Abroad: Adv Spanish II | 4 | |
| SPAN 353 Language Study Abroad: Cultural Stdies I | 4 | |
| SPAN 354 Language Study Abroad: Cultural Stdies II | 4 | |
| **V. Latin America in Global Perspective** (select one of the following): | | **4** |
| BIOL 326 Environmental Science | 4 | |
| ECON 397 International Studies in Economics* | 4 | |
| ESSM 312 Food, Culture, & Society* | 4 | |
| HIST/POLS 451 Geography of International Affairs | 4 | |
| PHYS 100 Physics for Society* | 4 | |
| PHYS 408 International Physics Experience* | 4 | |
| POLS 319W International Relations | 4 | |
| POLS 363 Politics of Developing Nations | 4 | |
| **VI. Capstone Experience**** | | **4** |
| **General Electives** (chosen with advisor's approval) | | **12-24** |
| **Total Required Credits** | | **128** |

*Courses must have a Latin American focus.

**Students must take a discipline-based senior seminar in an Arts and Sciences department. The research project must have Latin American-related content, as determined through agreement with the advisor and the seminar professor.

## History Minor

| History Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **History Core** | | **12** |
| HIST 200 The West in Global Perspective | 4 | |
| HIST 217 Early America to 1877 | 4 | |
| HIST 218 Modern America since 1865 | 4 | |
| **History Electives** (select three history courses at or above the 300-level) | | **12** |
| **Total Required Credits** | | **24** |

## Asian Studies Minor

| Asian Studies Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Asian Studies** | | **4** |
| HIST 463 Monsoon Asia: Survey of Cultural History | 4 | |
| **History** | | **24** |
| HIST 395 Asia: Land and People | 4 | |
| HIST 441 History of China to 1644 | 4 | |
| HIST 442 History of China since 1644 | 4 | |
| HIST 443 History of Modern Japan | 4 | |
| HIST 444 Asia's Response to the West | 4 | |
| HIST 456 Vietnam: An American Watershed | 4 | |
| **Total Required Credits** | | **28** |

## Latin American Studies Interdisciplinary Minor

| Latin American Studies Interdisciplinary Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Latin American Studies Core** | | **12** |
| LAST 201 Introduction to Latin American Studies | 4 | |
| SPAN 301W Conversation/Composition/Grammar* | 4 | |
| SPAN 302W Conversation/Composition/Reading* | 4 | |
| **Latin American Cultural Studies** (choose one) | | **4** |
| LAST 380 Latin American Studies Seminar | 4 | |
| SPAN 316 Latin American Culture I* | 4 | |
| SPAN 317 Latin American Culture II | 4 | |
| **Latin American Studies Electives** (choose two) | | **8** |
| GEOG 396 Latin America: Land and People | 4 | |
| HIST 461W Latin American History | 4 | |
| POLS 322 Latin American Politics | 4 | |
| **Total Required Credits** | | **24** |

*Or the equivalent SPAN study abroad option in Latin America.

## Courses

**HIST 200 The West in Global Perspective (4)**
Examination of the development of Western Civilization in its global setting since 1500, through its political, social, economic, and scientific evolution. Required of history majors. Offered: Fall and Spring.

**HIST 217 Early America to 1877 (4)**
Social, cultural, and political overview of American history from its colonial beginnings through the end of Reconstruction. Required of history majors. Offered: Fall and Spring.

**HIST 218 Modern America since 1865 (4)**
Social, cultural, and political overview of American history from 1865 to the present. Required of history majors. Offered: Fall and Spring.

**HIST 300W The Historian's Craft (4)**
Introduction to historiography and historical methods and techniques covering the use of primary and secondary sources, note-taking, citation (including Turabian), and Internet sources. Includes completion of a substantial research paper based on both primary and secondary sources, especially as preparation for further upper-division work. Seminar format; required of history majors. Offered: Fall and Spring.

**HIST 301W Colonial and Revolutionary America to 1789 (4)**
Examination of colonial America focusing on European background; economic, political, and cultural growth; and the American Revolution.

**HIST 302 The New Nation, 1789-1860 (4)**
Examination of the growth of the United States from the constitutional era through the onset of the sectional conflict.

**HIST 305 The Civil War and Reconstruction (4)**
Advanced study of the forces and events involved in the coming of the great American conflict, the war years, and Reconstruction.

**HIST 306 The Emergence of Modern America, 1865-1929 (4)**
Survey of aspects that helped define terms for the politics, economics, and culture of the early 20th century, such as the rise of heavy industry; the businessman as new folk hero; business consolidations and urbanization; "New Immigration" and "Social Darwinism;" and the clash of protests from organized labor, Populism, Socialism, and the Social Gospel.

**HIST 307 The Great Depression and the New Deal, 1918-1945 (4)**
Examination of American social, cultural, and political history during the 1920s and 1930s.

**HIST 308 Contemporary America: Media and Politics (4)**
Survey of media, politics, and culture since the end of World War II. Co-listed as JMC 308.

**HIST 313 Reformation Europe (4)**
Study of the dynamic forces loosed in the Reformation, with cultural, intellectual, theological, and political emphases.

**HIST 316 The Age of Revolutions (4)**
Study of Europe and America during the 17th and 18th centuries.

**HIST 317 Nationalism (4)**
Advanced study of 19th-century and 20th-century European history focusing on the rise of nationalism and its consequences.

**HIST 322 Early 20th Century Europe (4)**
Advanced study of the political, economic, military, and cultural aspects of European history and Europe's international relations, 1900-1945.

**HIST 323 Recent European History (4)**
Advanced study of late 20th century European history since 1945. Emphasis on the political, economic, military, and cultural aspects of Europe and Europe's international relations.

**HIST 348 Riots, Rebellions, and Revolutions (4)**
Examination of radical social change through comparison of various revolutions (e.g., English, American, French, Russian, and Chinese). Co-listed as POLS 348. Offered: Jan Term, on rotation.

**HIST 390 Monarchs, Bishops, and Martyrs: The English Reformation (4)**
Study of historical and religious factors of the English Reformation. Course is taught in London with visits to historical sites. Co-listed as POLS 390 and RELG 390. Offered: Jan Term, on rotation.

**HIST 391 United States and Canada: A Regional Geography (4)**
Field-based exploration of the geography of the U.S. and Canada, including analysis of physical, cultural, economic, and political landscapes. Emphasis on the importance of the two countries as a center of world economic power. Co-listed as GEOG 391. Offered: Summer 1, on rotation.

**HIST 393 Europe: Land and People (4)**
In-depth analysis of landforms and cultural, political, and economic factors which shape the character of the region. Co-listed as GEOG 393 and POLS 393. Offered: On rotation.

**HIST 395 Asia: Land and People (4)**
Regional analysis of the Asian continent focusing on the spatial patterns of physical structure, culture, environment, history, and politics which characterize the region. Co-listed as GEOG 395 and POLS 395. Offered: On rotation.

**HIST 398 The Alabama Constitution: 100 Years of Controversy (4)**
Examination of the creation, structure, and interpretation of state constitutions. Special attention paid to the 1901 Alabama Constitution and issues surrounding the document as well as to current and past reform movements. Co-listed as JMC 398 and POLS 398.

**HIST 399 London Study Topics (4)**
Special courses designed for and offered at the Daniel House London Study Centre.

**HIST 401 Oral History: Traditions and Techniques (4)**
Topical study of the American national experience through the culture of the folk, with emphasis on oral history as an essential dimension of the historical narrative of the American people. Includes methodological study of oral history as a research technique, which is particularly valuable in preserving and comprehending the heritage of the folk.

**HIST 402W The History of American Women (4)**
Study of women who have made a significant impact on mainstream American history and also of the role and status of ordinary women. Includes consideration of the forces that have been exerted on American society by women as a group and the forces that have been exerted upon women.

**HIST 403 Civil Rights Movement in America (4)**
Advanced study of the Civil Rights Movement in the United States in the twentieth century.

**HIST 407 The Old South (4)**
Study of the antebellum South. Special consideration given to race, slavery, and the evolution of sectionalism.

**HIST 408 The New South (4)**
Study of the South from Reconstruction to the present.

**HIST 409 History of Alabama (4)**
Political, social, and cultural examination of Alabama in a regional and national context.

**HIST 410 The American Presidency (4)**
Examination of the historical evolution of the American presidency, with particular emphasis on the expansion of presidential powers during the 20th century.

**HIST 415 Historical Geography of North America (4)**
Survey of the progress of settlement of North America, particularly the United States and Canada. Topically structured, the course focuses on the historical evolution of the North American landscape through a study of settlement patterns, migrations, ethnicity, development of transportation networks, and economic land use systems. Offered: Fall, on rotation.

**HIST 421W Ancient Near East and Greece (4)**
Review of the characteristics and contributions of this region from the rise of civilizations and the development of society in Sumeria, Egypt, Mesopotamia, Syria-Palestine, Asia Minor, and Greece.

**HIST 422 Roman Republic and Empire (4)**
Study of the growth of Roman civilization, with emphasis on Rome's political, cultural, and religious contributions.

**HIST 424 Early Modern England (4)**
Study of English political, social, and cultural history from 1485 through the Glorious Revolution.

**HIST 425W Modern England (4)**
Study of the development of the English nation and empire since 1750.

**HIST 426W The Modern Middle East (4)**
Study of the emergence of modern nation-states in the Middle East, beginning with the framework of the Ottoman Empire. Course focuses on political and social problems since 1800.

**HIST 429 Old Russia (4)**
Review of the development of Russian social, political, economic, and religious institutions through 1861.

**HIST 431W Russia since 1861 (4)**
Review of Russian and Soviet history from the emancipation of the serfs to the present. Focus of lectures is on politics, international relations, and ideologies; focus of most of the required reading and research papers is on Russian culture, broadly defined.

**HIST 433W Baptists: Their History and Theology (4)**
Survey of Baptist history from its beginnings in colonial America to the present. Co-listed as RELG 433W.

**HIST 434 Folklore: Europe to America (4)**
Study of the pre-history of European peoples in the context of 19th century awakenings of nationalism. Emphasis on the legends, mythologies, and folk literature of Germanic, Slavic, and Celtic areas, as related to their impact on the course of recent history. Includes cross-comparisons with Native American folk culture.

**HIST 438 The Family, Sex, and Marriage in Modern Europe (4)**
Examination of the development of the European family from the Industrial Revolution to contemporary times. Emphasis on the evolution of marriage, parent-child relationships, and the role of wider kin in family formation.

**HIST 441 History of China to 1644 (4)**
Examination of the major political, social, economic, and cultural developments of Chinese civilization through 1644, and evaluation of the impact of these developments on world history.

**HIST 442 History of China since 1644 (4)**
Examination of the major political, social, economic, and cultural developments of Chinese civilization since 1644, and evaluation of the impact of these developments on world history.

**HIST 443 A History of Modern Japan (4)**
Examination of the major political, economic, and social developments of Japan since 1868.

**HIST 444 Asia's Response to the West (4)**
Introduction to the way in which China, Japan, and Southeast Asia, including Malaysia, Indonesia, and the Philippines, have responded to Western imperialism.

**HIST 445W Constitutional History of the United States (4)**
Review of the development of the basic concepts of American constitutional law. Co-listed as POLS 445W.

**HIST 447 The Development of American Law (4)**
Review of the development of American Law. Co-listed as POLS 447.

**HIST 451 Geography of International Affairs (4)**
Analysis of spatial elements of international affairs. Investigation of the development of states, boundary conflicts, and other geographic elements such as population, resources, and international trade. Co-listed as POLS 451. Offered: Spring.

**HIST 456 Vietnam: An American Watershed (4)**
Study of the Vietnam War, its origin, and its impact on American society.

**HIST 460 Internship (2-8)**
Student internships in local, state, national, and international offices and agencies under supervision of the instructor. Variable credit; can be taken more than once for maximum of eight credits. Prereq: Permission of the instructor and department chair.

**HIST 461W Latin American History (4)**
Survey of modern Latin American History, including a study of the diplomatic relations among the Latin American nations from their independence to the present. Emphasis on conflicts and agreements between and among nations of Latin America, as well as relations with the U.S.

**HIST 463 Monsoon Asia: Survey of Cultural History (4)**
Broad cultural history of China, Japan, India, and Indonesia.

**HIST 464 Africa/Mideast: Survey of Cultural History (4)**
Broad cultural history of Africa and the Middle East.

**HIST 479 Rise of the British State (4)**
Examination of the emergence of the national government in Britain over the last 500 years through the lens of government's growing impact on citizens' daily life. Co-listed as POLS 479. Offered: Jan Term, in London.

**HIST 490 War and Society (4)**
Study of United States military policy, weapons, and strategy, with emphasis on the twentieth century.

**HIST 495W Senior Seminar (4)**
Intense examination of selected topics in history with emphasis on directed research and writing. Topics vary. Required of all history majors, usually in their senior year. Juniors with a GPA of 3.50 or better in history courses may register with the instructor's written permission. Prereq: HIST 300. Offered: Fall and Spring.

**HIST 497 Independent Studies in History (4)**
Directed readings and research involving a particular field or period of history designed to give preparation in special areas not fully covered in regular course offerings. Prereq: Permission of the instructor and department chair.

**HIST 499 Special Topics in History (4)**
Unique, one-time courses offered either by visiting professors or as experimental advanced courses by members of the department.

# Journalism and Mass Communication

## Faculty

Raymond N. Ankney, Chair, Associate Professor
Jon Clemmensen, Professor
Dennis R. Jones, Associate Professor
David S. Shipley, Associate Professor
N. Melissa Tate, Assistant Professor

## Undergraduate Programs and Requirements

### Major

Journalism and Mass Communication with a Concentration in
- Advertising
- Broadcast and Electronic Journalism
- Print Journalism
- Public Relations

### Minor

Journalism and Mass Communication (with one of four tracks)

The department offers a major in journalism and mass communication, with four possible concentrations, or tracks: advertising, broadcast and electronic journalism, print journalism, and public relations. Students must officially declare a concentration/track, and each leads to a bachelor of arts degree.

Journalism and mass communication (JMC) majors are also required to have a 20-credit minor or cognate outside the JMC department. The minor is determined by the student in consultation with a journalism and mass communication advisor.

The department also offers a minor in journalism and mass communication with four possible tracks: advertising, broadcast and electronic journalism, print journalism, and public relations.

### Admission to the Department of JMC

**Admitted Freshman Majors:** Must achieve a JMC GPA of 2.75 or better upon completing JMC 200 (Mass Media and Society) and JMC 201 (Mass Media Practices). Students who fail to meet this requirement must change majors.

**Students who Transfer and/or Change Majors:** Must have completed UCCA 101 (Communication Arts I) or the equivalent with a grade of C+ or better, and must have a Samford GPA of 3.00 or better. If a Samford GPA does not exist, a higher education GPA of 3.00 or better will qualify.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. JMC majors must take MATH 110 (Contemporary Mathematics) or higher to fulfill the general education mathematics requirement.

### Journalism and Mass Communication Major

| Journalism and Mass Communication Major Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **30-42** |
| **Natural and Computational Sciences** | | **8** |
| **Social Sciences** | | **4** |
| **Mathematics** | | **4** |
| MATH 110 Contemporary Mathematics *or* higher | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Journalism & Mass Communication Major:** | | **42** |
| **Journalism & Mass Communication Core** | | **30** |
| JMC 200 Mass Media and Society | 4 | |
| JMC 201 Mass Media Practices | 4 | |
| JMC 300W Mass Media Writing and Editing | 6 | |
| JMC 301 Mass Media Ethics | 2 | |
| JMC 302 Mass Media Law | 2 | |
| JMC 310 Mass Media Production | 6 | |
| JMC 331 Mass Media Externship | 2 | |
| JMC 401W Senior Thesis *or* JMC 402W Applied Communication Research | 4 | |
| **Journalism & Mass Communication Electives** (Must select two, 2-credit elective courses to satisfy requirement.) | | **4** |
| **Journalism Concentration** (Choose one of the tracks below and complete both courses.) | | **8** |
| **Advertising Track** | | |
| JMC 411W Advertising/Marketing Communication | 4 | |
| JMC 412 Advertising/IMC Practicum | 4 | |
| **Broadcast and Electronic Journalism Track** | | |
| JMC 421 Adv Mass Media Applications-Electronic | 4 | |
| JMC 422 Video Practicum | 4 | |
| **Print Journalism Track** | | |
| JMC 431 Adv Mass Media Applications-Print/Web | 4 | |
| JMC 432 Magazine/E-zine Practicum | 4 | |
| **Public Relations Track** | | |
| JMC 441W Public Relations Communication | 4 | |
| JMC 442 Public Relations Practicum | 4 | |
| **Required Minor or Cognate** | | **20** |
| **General Electives** | | **2-14** |
| **Total Required Credits** | | **128** |

## Courses

**JMC 200 Mass Media and Society (4)**
Introduction to mass communication with an emphasis on exposure to mass media messages, the industry, message effects, historical perspective, communication theories, and media literacy. Offered: Every semester.

**JMC 201 Mass Media Practices (4)**
Introduction to mass media systems from a producer perspective with an emphasis on practices and issues. Historical, cultural, political, technological, and social forces that mold and constrain current media forms and products are discussed. Includes the academic response as well as an introduction to scholarly research in the field of journalism and mass communication. Prereqs: JMC 200 for majors. Offered: Every semester.

**JMC 252 Photojournalism (2)**
Introduction to photographic techniques and the study of news feature reporting through photographs. Emphasis on visual composition, developing, and printing. Offered: Fall.

**JMC 300W Mass Media Writing and Editing (6)**
Introduction to writing and editing journalistic and persuasive copy for distribution in converged mass media: print, electronic, and online. Prereq: JMC 200, 201; UCCA 101 or its equivalent, with a C+ or better; and ability to type 30 words per minute. Offered: Fall.

**JMC 301 Mass Media Ethics (2)**
Review of the basic principles of professional ethics and social responsibility in the mass media. Prereq: JMC 300W. Offered: Summer 1 and Spring.

## Journalism and Mass Communication Minor

| Journalism and Mass Communication Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Journalism and Mass Communication Core** | | **16** |
| JMC 201 Mass Media Practices | 4 | |
| JMC 300W Mass Media Writing and Editing | 6 | |
| JMC 310 Mass Media Production | 6 | |
| **Journalism Track** (Choose one of the tracks below and complete both courses.) | | **8** |
| **Advertising Track** | | |
| JMC 411W Advertising/Marketing Communication | 4 | |
| JMC 412 Advertising/IMC Practicum | 4 | |
| **Broadcast and Electronic Journalism Track** | | |
| JMC 421 Adv Mass Media Applications-Electronic | 4 | |
| JMC 422 Video Practicum | 4 | |
| **Print Journalism Track** | | |
| JMC 431 Adv Mass Media Applications-Print/Web | 4 | |
| JMC 432 Magazine/E-zine Practicum | 4 | |
| **Public Relations Track** | | |
| JMC 441W Public Relations Communication | 4 | |
| JMC 442 Public Relations Practicum | 4 | |
| **Total Required Credits** | | **24** |

**JMC 302 Mass Media Law (2)**
Study of mass media law with an emphasis on libel, access, privacy, contempt, copyright, and freedom of information. Prereq: JMC 300W. Offered: Fall.

**JMC 308 America since 1945: Media and Politics (4)**
Survey of media, politics, and culture since the end of World War II. Co-listed as HIST 308.

**JMC 310 Mass Media Production (6)**
Introduction to designing and producing journalistic and persuasive messages for converged digital mass media: print, electronic, and online. Prereqs: JMC 200, 201, and 300W. Offered: Spring.

**JMC 331 Mass Media Externship (1-2)**
Practical experience working under the supervision of qualified practitioners in print, broadcasting, advertising, or public relations. Two credits for the first internship, maximum three credits. Prereq: JMC 300W and 310. Offered: Fall, Spring, and Summer 2.

**JMC 352 Web Page Communication (2)**
Study of format and production of messages for distribution via the World Wide Web. Includes the how-to's of creating and publishing software packages, HTML, tables, and animated GIFs.

**JMC 362 The Film Genre (2)**
Study of the history of the film industry in America and its cultural effects. Offered: Summer 1 and Jan Term.

**JMC 364 Film Criticism (2)**
Introduction to critical theory as applied to film. Practical application of theory in the form of critical essays. Offered: Summer I and Jan Term.

**JMC 372 Media of Religion (2)**
Investigation of the relationship between two First Amendment rights: freedom of religion and freedom of the press. Course looks at how the church uses a variety of media to communicate the gospel message, how religion is reported in the secular media, and the effects on religion of media-use and vice versa.

**JMC 382 Feature Writing (2)**
Practical application in planning, developing, writing, and submitting manuscripts for publication in magazines and newspapers. Includes a study of query letters, markets, and market requirements.

**JMC 398 The Alabama Constitution: 100 Years of Controversy (4)**
Examination of the creation, structure, and interpretation of state constitutions. Special attention paid to the 1901 Alabama Constitution and issues surrounding the document, as well as to current and past reform movements. Co-listed as HIST 398 and POLS 398.

**JMC 399 London Study Topics (4)**
Special courses designed for and offered at the Daniel House London Study Centre. Topics vary. Offered: Jan Term.

**JMC 400 Senior Seminar (2)**
In-depth examination of selected mass communication topics. Students examine current mass communication issues, prepare group class discussions on the issues, and complete an extensive research paper on a selected mass communication topic. Prereq: Senior standing.

**JMC 401W Senior Thesis (4)**
Capstone experience that includes design, analysis, implementation, testing, and documentation of an original research project. Prereq: Senior standing. Offered: Fall.

**JMC 402W Applied Communication Research (4)**
Introduction to current mass media research techniques as practiced in the print, broadcast, advertising, and public relations industries. Includes survey research, focus group research, interviewing, and simple experimental techniques as well as basic principles of data collection, analysis, interpretation, and reporting. Research project required. Prereqs: Senior standing and MATH 110. Offered: Fall.

**JMC 411W Advertising/Marketing Communication (4)**
Practical application of principles of writing and producing persuasive materials for integrated marketing communications (IMC) purposes, including advertising, marketing, public relations, publicity, and promotions. Prereqs: JMC 300W and 310. Offered: Fall.

**JMC 412 Advertising/IMC Practicum (4)**
Practical application in researching, planning, writing, scheduling, budgeting, and evaluating the creative campaign in a blend of form and function. Includes media selection, copy and layout, audio and video taping, story boards, and preparation of detailed budgets. Prereq: JMC 411W. Offered: Spring.

**JMC 421 Advanced Mass Media Applications-Electronic (4)**
Practical application of photographing, reporting, writing, editing, and producing journalistic and persuasive digital video materials for broadcast and online media. Prereqs: JMC 300W and 310. Offered: Fall.

**JMC 422 Video Practicum (4)**
Practical application in producing and directing. Includes staging, lighting, graphics, video control, and composition. Students produce a weekly news/public affairs video magazine (Samford News Network [SNN]). Prereqs: JMC 421. Offered: Fall.

**JMC 431 Advanced Mass Media Applications-Print/Web (4)**
Practical application of writing, editing, and producing materials for print publications including newspapers and magazines. Prereqs: JMC 300W and 310. Offered: Fall.

**JMC 432 Magazine/E-zine Practicum (4)**
Practical application in magazine production. Students write articles, edit, design, market, and publish a magazine. Prereqs: JMC 431. Offered: Spring.

**JMC 441W Public Relations Communication (4)**
Intermediate course in various media techniques used by public relations professionals to reach and influence desired publics. Prereqs: JMC 300W and 310. Offered: Fall.

**JMC 442 Public Relations Practicum (4)**
Practical application in planning and managing a campaign with emphasis on problem analysis, crisis, and issues management. All students work in a student-run public relations agency. Prereq: JMC 441W. Offered: Spring.

**JMC 452 Seminar in Media Practices (2-4)**
In-depth study of the roles of the advertising, broadcasting, journalism, and public relations practitioner in the daily practice of the craft. Course includes background research on specific media organizations and subsequent visits to each. Prereqs: JMC 201; Junior standing and/or permission of the instructor. Offered: Jan Term, on rotation.

**JMC 454 International Mass Media (2)**
Introduction to and comprehensive survey of international mass media systems and theories with an emphasis on comparative issues, characteristics, and developments. Course is taught abroad.

**JMC 462 History of Mass Media (2)**
Survey and analysis of the origin, development, influence, and outlook of mass media in America with an emphasis on issues, trends, standards, policies, methods, and controls. Prereq: JMC 201.

**JMC 464 Mass Media Management (2)**
Introduction to the basic principles and practices of personnel and business management as applied to mass media organizations. Prereq: Junior standing. Offered: Spring and Summer 1.

**JMC 472 Advanced Print Media Literacy (2)**
In-depth individual and group work in print media production, half-tone reproduction, and graphic design. Includes sophisticated manipulation of type, graphics, and white space in tabloid, magazine, and newsletter design. Prereq: JMC 310. Offered: Fall.

**JMC 474 Advanced Electronic Media Literacy (2)**
In-depth individual and group work in video production, direction, and postproduction. Includes sophisticated manipulation of light, image, sound, and the use of computer-generated graphics. Prereq: JMC 310.

**JMC 482 Independent Study (1-4)**
Directed-reading, research, and analysis involving a particular field of interest resulting in a project or paper. Course may be repeated for different topics; maximum of 8 credits. Prereq: Junior standing and/or permission of the instructor.

**JMC 492 Special Topics in Mass Media (2-4)**
In-depth analysis of a contemporary mass communication topic that is not normally covered in other JMC offerings. Topics vary according to the instructor. Course may be repeated for different topics; maximum of 8 credits. Prereq: JMC 201.

# Mathematics and Computer Science

## Faculty

Bruce W. Atkinson, Chair, Professor
Steven F. Donaldson, Associate Professor
David L. Foreman, Associate Professor
Emily A. Hynds, Associate Professor
Sonya S. Stanley, Associate Professor
Janie A. Kennedy, Assistant Professor
Jeffrey S. Powell, Assistant Professor
Brian R. Toone, Assistant Professor
Ruric E. Wheeler, Research Professor
Gregory A. Kawell, Instructor
Candace H. Todd, Instructor

## Undergraduate Programs and Requirements

### Majors
Computer Science
Mathematics
Dual-Degree Engineering Program

### Minors
Computer Science
Mathematics

The department offers two majors: mathematics and computer science, both leading to the bachelor of science degree. Students planning to earn an Alabama teacher's certificate in mathematics should consult the department chair and refer to the Orlean Bullard Beeson School of Education and Professional Studies section of this catalog.

The department also offers a dual-degree engineering program in conjunction with the Department of Physics and the engineering schools of several regional universities. The five-year program leads to two degrees: a bachelor of science degree from Samford with a major in mathematics or physics, and a bachelor of engineering degree from the participating university. (See the Undergraduate Dual-Degree Engineering Program section below for more details.)

Students interested in pursuing an engineering career need not necessarily enter the dual-degree program. Since mathematics, physics, computer science, and chemistry are basic in all engineering curricula, students taking basic courses in these fields are well prepared to transfer to any engineering school. At Samford, students can complete half the curriculum required in any of the following fields of engineering: mechanical, electrical, civil, chemical, highway, and aeronautical. Interested students are advised to check with several engineering schools to determine which Samford courses would transfer directly.

The department also offers two minors: mathematics and computer science.

**University Core Curriculum and General Education Requirements**
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Note: Any math course taken to meet requirements for a major or minor in the department may also be used to meet the general education mathematics requirement.

## Undergraduate Dual-Degree Engineering Program

The Department of Mathematics and Computer Science and the Department of Physics offer a dual-degree engineering program jointly with the following universities: University of Alabama at Birmingham, Auburn University, Washington University (Missouri) and Mercer University (Georgia).

Students in this five-year program will first pursue a three-year general curriculum at Samford, followed by a two-year general technical curriculum at one of the participating engineering schools. Students apply to the engineering school during their third year at Samford. Applications must include a letter of recommendation from the chair of the mathematics and computer science department or from the chair of the physics department (depending on the track

selected), as well as documentation that the candidate will complete the required coursework at Samford. Candidates must satisfy the admission requirements for the participating engineering school, and should contact the school well in advance of application. The program consists of 96-108 credits at Samford (depending on placement in world languages). Both departments have checklists available for this program: one for the mathematics track and one for the physics track. Please see either department chair for further information.

## Mathematics Major

The department strongly recommends that students planning on graduate studies in mathematics take MATH 430 (Abstract Algebra) and MATH 440 (Introductory Real Analysis). Such students are likely to take at least one or two courses more than the minimum requirement for the major.

**Note:** Students may also receive secondary certification by completing 44 credits of professional studies. Contact the chair of the Department of Teacher Education for more information.

| Mathematics Major<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **Mathematics Major:** | | | **44** |
| **Mathematics** | | | **32** |
| MATH 240 | Calculus I | 4 | |
| MATH 260 | Calculus II | 4 | |
| MATH 270 | Calculus III | 4 | |
| MATH 280 | Intro to Advanced Mathematics | 4 | |
| MATH 330 | Differential Equations | 4 | |
| MATH 340 | Linear Algebra | 4 | |
| MATH 430<br>MATH 440 | Abstract Algebra *or*<br>Introductory Real Analysis | 4 | |
| MATH 485 | Senior Seminar | 2 | |
| MATH 495W | Senior Project | 2 | |
| **Mathematics Upper-Level Electives**<br>(at least four credits must be at the 400 level) | | | **8** |
| **Computer Science** | | | **4** |
| COSC 110 | Introduction to Programming | 4 | |
| **General Electives** | | | **20-32** |
| | | **Total Required Credits** | **128** |

## Mathematics Minor

| Mathematics Minor<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Mathematics Core** | | | **16** |
| MATH 240 | Calculus I | 4 | |
| MATH 260 | Calculus II | 4 | |
| MATH 270 | Calculus III | 4 | |
| MATH 280 | Intro to Advanced Mathematics | 4 | |
| **Mathematics Upper-Level Elective** | | | **4** |
| **Computer Science** | | | **4** |
| COSC 110 | Introduction to Programming | 4 | |
| | | **Total Required Credits** | **24** |

## Computer Science Major

In conjunction with the standard major, the department supports special interdisciplinary tracks in neuroinformatics, bioinformatics, and cognitive science. Consult the Computer Science Web site at http://www.samford.edu/schools/artsci/math/cs-home.html or contact the department for details.

| Computer Science Major<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **Computer Science Major:** | | | **48** |
| **Computer Science** | | | **44** |
| COSC 110 | Introduction to Programming | 4 | |
| COSC 200 | Discrete Structures for Computer Science | 4 | |
| COSC 210 | Data Structures and Algorithms | 4 | |
| COSC 305 | Computer Organization & Architecture | 4 | |
| COSC 306<br>COSC 315 | Principles of Bioinformatics *or*<br>Databases & Information Management | 4 | |
| COSC 325 | Languages and Theory | 4 | |
| COSC 335 | Operating Systems & Networking | 4 | |
| COSC 420 | Software Engineering | 4 | |
| COSC 460 | Current Topics in Computing | 4 | |
| COSC 470 | Artificial Intelligence and Advanced Computing Strategies | 4 | |
| COSC 495W | Senior Seminar and Project | 4 | |
| **Mathematics** | | | **4** |
| MATH 240 | Calculus I | 4 | |
| **General Electives*** | | | **16-28** |
| | | **Total Required Credits** | **128** |

*Must include 16 hours in an approved Applications Area. This is another discipline or plan of study defined with a student's advisor in which computing may be used as a tool. Typical choices include, but are not limited to, mathematics, natural or social sciences, GIS, and business. A student planning to do graduate work in computing should select mathematics as his/her Applications Area, and take as electives any upper-level computing courses specified as prerequisites for the graduate program.

## Computer Science Minor

| Computer Science Minor<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Computer Science Core** | | | **12** |
| COSC 110 | Introduction to Programming | 4 | |
| COSC 200 | Discrete Structures for Computer Science | 4 | |
| COSC 210 | Data Structures and Algorithms | 4 | |
| **Computer Science Electives** | | | **12** |
| | | **Total Required Credits** | **24** |

# Courses

## MATHEMATICS

### MATH 107 Mathematics for Elementary Teachers (4)

Designed to strengthen understanding of the mathematics that prospective teachers will teach. Includes review of natural numbers, whole numbers, integers, rational numbers, real numbers, and their properties; the variety of representations of different operations; algebraic reasoning and representation; measurements of area, perimeter, surface area, and volume; and geometry concepts including transformations, constructions, and similarities. Offered: Fall, Spring, and possibly Jan Term or Summer.

### MATH 110 Contemporary Mathematics (4)

Development of problem-solving skills obtained by studying a wide range of contemporary applications of mathematics. Connections between contemporary mathematics and modern society are stressed. Prereq: Suitable score on placement exam. Offered: Fall, Jan Term, Spring, and Summer 1.

**MATH 150 Precalculus (4)**
Introduction to a combination of standard topics from college algebra and trigonometry. Includes examples of modern mathematical modeling, ideas, and applications, plus the skills and knowledge needed for subsequent mathematics courses and/or real world applications. Covers linear, quadratic, exponential, power, logarithmic, polynomial, inverse, and trigonometric functions. Graphing calculator required; consult department for recommended model. Prereq: Suitable score on placement exam. Offered: Fall, Jan Term, Spring, and Summer 1.

**MATH 210 Elementary Statistics (4)**
Introduction to algebra-based statistics. Includes review of descriptive and inferential statistics with probability decision-making skills necessary for today's complex civilization. Covers frequency, probability, binomial, normal, chi-square and sampling distributions, estimation, hypothesis testing for one and two populations, linear correlation and regression, and analysis of variance. Some class assignments completed using a statistical computing software package. Graphing calculator required; consult department for recommended model. Prereqs: Suitable score on placement exam. Offered: Fall, Spring, Summer 1, possibly Summer 2 or Jan Term.

**MATH 240 Calculus I (4)**
Introductory study of calculus, beginning with a review of precalculus functions with an emphasis on graphical, numerical, and modeling applications. Topics include: limits, continuity, derivatives and their interpretations, tangent line approximations, the definite integral as a limit of Riemann sums, applications of the definite integral to area and average value, the Fundamental Theorem of Calculus, rules of derivatives, formulas for derivatives of precalculus functions, implicit functions, economics applications, optimization and modeling, and Newton's method. Some class assignments/projects completed using the computer algebra system, Mathematica. Graphing calculator required; consult department for recommended model. Prereqs: MATH 150 or suitable score on placement exam. Offered: Fall, Jan Term, Spring, and possibly Summer.

**MATH 260 Calculus II (4)**
Sequel to MATH 240. Topics include: Antiderivatives, integration by substitution, integration by parts, approximation of definite integrals, improper integrals, setting up of Riemann sums in applications, applications of definite integrals to geometry, physics, and economics, probability distributions, simple first order differential equations, slope fields, Euler's method, separation of variables, growth and decay, systems of differential equations, applications of second order equations to oscillations, Taylor approximations, and Taylor series. Some class assignments/projects completed using the computer algebra system, Mathematica. Graphing calculator required; consult department for recommended model. Prereq: Grade of C or better in MATH 240. Offered: Fall and Spring.

**MATH 270 Calculus III (4)**
Sequel to MATH 260. Topics include: Functions of two and three variables, graphs of surfaces, contour plots, vectors, dot products, cross products, partial derivatives, local linearity, differentials, directional derivatives, gradients, chain rule, partial differential equations, constrained and unconstrained optimization, multivariable integration, iterated integrals, numerical integration by the Monte Carlo method, change of variables in multivariable integrals, parameterized curves, and surfaces. Some class assignments/projects completed using the computer algebra system, Mathematica. Graphing calculator required; consult department for recommended model. Prereq: Grade of C or better in MATH 260. Offered: Fall and Spring.

**MATH 280 Introduction to Advanced Mathematics (4)**
Transition from calculus sequence to upper-level math. Primary objective is learning how to read, understand, and write proofs; hence, logic and proof techniques and strategies are heavily discussed. Secondary objective is learning certain basic math concepts needed for upper-level math courses, including set theory, functions, and relations. Other topics may include infinite sets, the set of integers, the set of real numbers, discrete math, and basic number theory. Prereq or co-req: MATH 270. Offered: Fall and Spring.

**MATH 320 Numerical Analysis (4)**
Study of fine differences, interpolations, differentiation and integration, Lagrangian formulas, solutions of equations, systems of equations initial-value problems for ordinary differential equations, curve fitting, and approximation theory. Prereq: MATH 270. Strongly recommended prereq: MATH 280 and/or COSC 200.

**MATH 330 Differential Equations (4)**
Study of ordinary differential equations. Methods of solutions to differential equations are presented and applied in detail. Topics include the general solution to a linear differential equation, linear homogeneous and nonhomogeneous differential equations of higher order with constant coefficients, Laplace transforms, infinite series methods, Legendre Polynomials, Bessel Functions, and linear systems of differential equations. Prereq: MATH 270. Strongly recommended prereq: MATH 280 and/or COSC 200. Offered: Spring.

**MATH 340 Linear Algebra (4)**
Study of fields, systems of linear equations, matrices, vector spaces, subspaces, bases and dimension, linear transformations, isomorphism, representation of transformations by matrices, linear functionals, determinants, eigenvalues and eigenvectors, invariant subspaces, inner product spaces, stochastic matrices, matrix exponentials, and numerical methods. Prereq: MATH 270. Strongly recommended prereq: MATH 280 and/or COSC 200. Offered: Fall.

**MATH 350 Vector Calculus (4)**
Study of vector algebra in two and three dimensions, equations of lines in space, scalar products, orientation, vector products, triple scalar products, vector identities, tensors, vector valued functions, velocity, tangent vectors, acceleration, vector fields, gradients, divergence, curl, the Laplacian, line integrals, potentials, conservative fields, irrotational fields, surface integrals, volume integrals, divergence theorem, Green's formula, and Stoke's theorem. Applications to electrostatics, force fields, potential theory, fluid flow, heat flow, gravitation, and wave equations. Prereq: MATH 270. Strongly recommended prereq: MATH 280 and/or COSC 200; PHYS 203 and PHYS 204.

**MATH 360 Complex Variables (4)**
Study of functions of a complex variable. Topics include analytic and harmonic functions, transformation and mapping, complex integration, power series, residues and poles, conformal mapping, and additional theory of functions. Prereq: MATH 270. Strongly recommended prereq: MATH 280 and/or COSC 200.

**MATH 370 Mathematical Statistics (4)**
Introduction to calculus-based probability theory and statistical inference. Topics include: probability measures, independence and conditional probability, discrete random variables, continuous random variables, distribution functions, expectations, multivariate distributions, correlations, binomial, Poisson, gamma, chi-square, normal distributions, sampling distributions, order statistics, moment-generating functions, functions of random variables, convergence of distributions, central limit theorem, point estimators, maximum likelihood, confidence intervals, hypothesis testing, sufficient statistics, Bayesian estimation, likelihood ratio tests, analysis of variance, linear regression, and nonparametric statistics. Prereq: MATH 270. Strongly recommended prereq: MATH 280 and/or COSC 200.

**MATH 410W Number Theory (4)**
Introduction to the theory of numbers. Topics include divisibility, factorization, prime numbers, congruencies, arithmetic functions, quadratic residues, and Diophantine equations. Additional topics may include primitive roots, continued fractions, cryptography, Fibonacci numbers, and numerical techniques. Prereq: MATH 280.

**MATH 420 College Geometry (4)**
Axiomatic, proof-oriented treatment of different geometries, including synthetic, metric, absolute, and Euclidean geometries. Other topics may include finite geometries, fractals, constructions, and specific non-Euclidean geometries. Prereq: MATH 280.

**MATH 430 Abstract Algebra (4)**
Introduction to abstract algebra, groups, rings, and fields. Topics include: binary operations, groups, subgroups, cyclic groups, groups of permutations, cosets, finitely generated groups, homeomorphisms, isomorphisms, factor groups, rings, fields, and integral domains. Additional topics may include fields of quotients, rings of polynomials, factor rings, ideals, unique factorization domains, and the Sylow Theorems. Prereqs: MATH 340 or MATH 410.

**MATH 440 Introductory Real Analysis (4)**
Proof-oriented introduction to topics in mathematical analysis. Topics include: field axioms of real numbers, completeness axiom, set theory, relations and functions, infinite sets, countable sets, open and closed sets, closure, limit points, Bolzano-Weierstrass theorem, limits and partial limits of sequences, monotone sequences, Cauchy sequences, limits of functions, continuity, extreme value theorem, intermediate value theorem, uniform continuity, differentiation, chain rule, mean value theorem, L'Hopital's rule, convergent series, tests for convergence of series, rearrangement of series, Riemann sums, Riemann integrability, Fundamental Theorem of Calculus, change of variables, sequences of functions, uniform convergence, and power series. Prereq: MATH 280.

**MATH 450 General Topology (4)**
Survey of the fundamental concepts of general topology which depend upon the elementary properties of sets and functions. Includes topological spaces, subspaces, continuity, homeomorphisms, product spaces, connectedness, compactness, separation properties, and metric spaces. Prereq: MATH 280.

**MATH 480 Topics in Mathematics (1-4)**
Independent study arranged between a student (or students) and a faculty member. Topics vary. May be repeated for credit. Prereqs: At least one upper-level mathematics course.

**MATH 485 Senior Seminar (2)**
Seminar with two components: 1) Topic selected by instructor and presented in the "Moore" style (i.e., a list of results are distributed to students, students responsible for presenting results in class.) 2) During the semester, students select a topic of research for the sequel course, MATH 495. They give brief presentations in class and turn in a written proposal for the project to be approved by all mathematics department faculty. In the time between the two courses, students begin to implement the proposal. Prereq: At least one 400-level MATH course.

**MATH 495W Senior Project (2)**
Students complete the project proposed in MATH 485. Instructor sets deadlines for rough drafts and students present fragments of the work periodically, with continual instructor feedback. Final outcome is a written project and a presentation that is reviewed by all department faculty. Prereq: MATH 485.

## COMPUTER SCIENCE

**COSC 107 Introduction to Computer Science (4)**
Exploration of the foundations of computing as a science, including how computing represents the effective merger of science, mathematics, and engineering. Incorporates hands-on experience to illustrate how computers operate based on simple principles of logic and abstraction; demonstrates how to communicate with them via algorithms and use of a simple programming language; evaluates limitations; examines alternative computing paradigms; considers emerging technologies; contemplates major innovations such as the Internet, virtual reality, and intelligent systems; and surveys a variety of issues facing society. Not a computer literacy course. Prereqs: Basic computer literacy (familiarity with file/folder manipulation, word processing, and spreadsheet applications); mathematics background suitable for placement into Precalculus.

**COSC 110 Introduction to Programming (4)**
Introduction to the fundamental techniques of programming as a foundation for more advanced study of computer science and as a tool for other disciplines. Includes introduction to object-oriented programming using Java. Focus on development of effective software engineering practice, emphasizing such principles as design, decomposition, encapsulation, procedural abstraction, testing, and software reuse. Topics include programming constructs, problem-solving strategies, the concept of an algorithm, recursion, fundamental data structures, and an introduction to machine representation, graphics, networking, and interactive development environments. Prereqs: Basic computer literacy (familiarity with file/folder manipulation, word processing, and spreadsheet applications); mathematics background suitable for placement into Precalculus.

**COSC 200 Discrete Structures for Computer Science (4)**
Introduction to discrete mathematics as it is used in computer science, fostering logical methods of problem solving and thinking. Topics include functions, relations, sets, propositional and predicate logic, simple circuit logic, proof techniques, finite state machines, Turing machines, elementary formal language theory, graph theory, Boolean algebra, computability, complexity, elementary combinatorics, and discrete probability. Prereqs: Mathematical preparation sufficient to take calculus at the college level. Offered: Fall.

**COSC 210 Data Structures and Algorithms (4)**
Extension of previously acquired foundational programming experiences, with particular emphasis on the use of data abstraction and object-oriented programming in the design and implementation of fundamental data structures and algorithms. Topics include recursion, basic data structures, efficiency, complexity, primary algorithms for searching, sorting, tree and graph manipulation, hashing, inheritance, and polymorphism. Includes significant programming experiences in a language such as Java. Prereqs: Grade of C or better in COSC 110; grade of C or better in COSC 200 desirable as prereq, but may be taken concurrently or with permission of the instructor.

**COSC 305 Computer Organization and Architecture (4)**
Study of concepts of computer systems and computer architecture. Focus on fundamentals of logic design, organization and structure of the major hardware components of computers, and the mechanics of information transfer and control within a computer system. Includes lab experiences in assembler language programming and simulation of computer circuits, and investigation of different architectures (composition and connection of larger blocks) supporting parallel computing and data communications. Prereqs: COSC 200 and COSC 210, with grades of C or better. Offered: Fall.

**COSC 306 Principles of Bioinformatics (4)**
Interdisciplinary biological and computational approach to science to gain new insights into complex living systems. Methods developed in this discipline address outstanding questions in medicine, behavior, health, pharmacy, genetics, the environment, and other biologically related areas. Co-listed as BIOL 306. Prereqs for all majors: BIOL 105, 110, or 203; or permission of the instructor. Additional prereqs for computer science majors: COSC 200 and COSC 210, with grades of C or better. Offered: Spring

**COSC 315 Databases and Information Management (4)**
Study of underlying concepts and structures in the design and implementation of database management systems. Includes lab experiences, such as implementation of DBMS projects using commercially available software. Also covered: design, creation, and maintenance of data files, and implementation of several methods in high-level language(s); sorting and searching techniques, and how they relate to various data structures; design and construction of user interfaces; ethical issues involving security and privacy, and other issues related to the use of distributed databases. Prereqs: COSC 200 and COSC 210, with grades of C or better. Offered: Spring.

**COSC 325 Languages and Theory (4)**
Study of the history of programming languages and styles; programming paradigms; language features supporting parallel and distributed computing; formal language theory, special purpose languages, automata, syntax, grammars, semantics, bindings, symbol tables, data types, scoping, parameter passing, abstract data types, computability and solvability, and complexity classes; design and implementation of (part of) a compiler; simulation of theoretical machines such as finite state automata; empirical comparisons of various algorithms and programming paradigms; and utility of interactive tools and environments. Prereqs: COSC 200, COSC 210, and MATH 240, with grades of C or better. Offered: Spring.

**COSC 335 Operating Systems and Networking (4)**
Introduction to the fundamentals of operating systems, networking, and communications; in-depth treatment of operating systems and their interface with hardware, applications, and system user; contemporary social and professional issues, such as intellectual property, risks and liabilities, and system security in the context of operating systems design; data communications and transmission methods; wide- and local-area networks; and simulation of (parts of) an operating system and of network protocols. Prereqs: COSC 200 and COSC 210, with grades of C or better. Offered: Spring.

**COSC 380 Scientific Methods of Computer-Based Instrumentation (4)**
Survey of computer-based instrumentation and software/hardware integration used to develop experiments or tests critical in the modern laboratory or industrial environment. Covers laboratory programming using fourth-generation visual computer language, acquisition and conditioning of real-world signals, and control of ASCII conversation-based bench-top instruments. Co-listed as CHEM 380 and PHYS 380. Prereqs: PHYS 102 or PHYS 204, and COSC 110 or equivalent. Offered: Fall, on rotation.

**COSC 410 Computer Science Research/Internship (1-4)**
Research project or internship completed under the supervision of a faculty member, with results presented in a written paper or other appropriate document (e.g., user's manual, if the project involves software development). Cannot substitute for required courses in the computer science major. May be repeated for a total of eight credits. Prereqs: COSC 110, with a grade of C or better, and permission of the instructor, in response to written proposal submitted by the student.

**COSC 420 Software Engineering (4)**
Examination of a range of topics integral to the design, implementation, and testing of a medium-scale software system, with practical experience of implementing such a project as a member of a programming team. Also includes material on professionalism and ethical responsibilities in software development and human-computer interaction. Prereqs: COSC 315, with a grade of C or better. Offered: Fall.

**COSC 460 Current Topics in Computing (4)**
In-depth exploration of a designated "topic of the year," providing a mechanism for study of important topics of current interest in the rapidly changing discipline of computer science. Includes research, simulation, and/or analysis of various approaches related to the topic(s) under study. Major emphasis on demonstration of maturity in use of various computer science tools in investigations. Such tools include programming, software development, research skills, communications skills, data structures, and algorithm analysis. Prereqs: Grades of C or better in at least one 300-level COSC course and MATH 240. Offered: Fall.

**COSC 470 Artificial Intelligence and Advanced Computing Strategies (4)**
Exploration of one of the ultimate computer science objectives: simulating intelligence in machines. Considers intelligent behavior in living beings, identifies problems confronting AI researchers, and explores a variety of approaches to the development of intelligent systems. Methodologies include traditional knowledge representation, search, and heuristic strategies, as well as alternative computational paradigms such as artificial neural networks. Cognitive behaviors in machines are modeled via computer simulation and robotics. Techniques presented draw on knowledge accumulated from a broad range of disciplines. Prereqs: Permission of the instructor. Computer science majors should have grades of C or better in at least one 300-level computer science course and should be proficient in Java or C++. A math background that includes calculus and advanced courses is helpful but not essential. Offered: Spring.

**COSC 495W Senior Seminar and Project (4)**
Capstone experience for computer science majors. Major emphasis on reviewing the entire range of topics studied within the curriculum and providing individual students an opportunity to accomplish a significant research or software development project. Students give both oral and written presentations of their projects and are required to take the Major Field Test (MFT) exam. Topic, scope, and (if appropriate) software to be used in the project must be approved in advance by the professor(s). Prereqs: Grades of C or better in one 400-level and two 300-level COSC courses and MATH 240. Offered: Spring.

# Philosophy

## Faculty

Dennis L. Sansom, Chair, Professor
B. Keith Putt, Professor

## Undergraduate Programs and Requirements

### Majors
Philosophy
Philosophy and Religion

### Minor
Philosophy

The Department of Philosophy offers a major in philosophy, plus a major combining philosophy and religion. Both majors earn the bachelor of arts degree. The department also offers a minor in philosophy.

**University Core Curriculum and General Education Requirements**
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. A philosophy major or minor can use either PHIL 241 (Introduction to Philosophy) or PHIL/RELG 200 (Christian Ethics) to satisfy the general education humanities requirement or the requirements for a major or minor in philosophy, but not both requirements.

### Philosophy Major
Students majoring in philosophy can take no more than two courses offered by the Birmingham Area Consortium of Higher Education (BACHE), i.e., University of Alabama at Birmingham, University of Montevallo, Birmingham-Southern College, or Miles College, after consultation with his/her advisor at Samford.

PHIL 301 (History of Philosophy: Ancient and Medieval) also counts toward a classics major. PHIL 301 or PHIL 302 (History of Philosophy: Modern and Contemporary) count towards a political science major. PHIL 311 (Philosophy of Religion: Is God Knowable?) counts towards a religion major. PHIL 301, PHIL 302, and PHIL 351 (Logic) count towards the pre-law program.

| Philosophy Major<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **Philosophy Major:** | | | **36** |
| **Philosophy Core** | | | **24** |
| PHIL 301 | History of Philosophy: Ancient/Medieval | 4 | |
| PHIL 302 | History of Philosophy: Modern/Contemp | 4 | |
| PHIL 314 | Ethics: Why be Moral? | 4 | |
| PHIL 328 | Metaphysics: What is Real? | 4 | |
| PHIL 351 | Logic | 4 | |
| PHIL 498W | Senior Seminar | 4 | |
| **Philosophy/Political Science Electives**<br>(select at least four courses) | | | **12** |
| PHIL 200 | Christian Ethics | 4 | |
| PHIL 241 | Introduction to Philosophy | 4 | |
| PHIL 311 | Philosophy of Religion: Is God Knowable? | 4 | |
| PHIL 321W | Existentialism | 4 | |
| PHIL 491, 492, 493 or 494W | Readings in Philosophy | 1,2,3 or 4 | |
| POLS 315 | Topics in Political Theory | 4 | |
| **General Electives** | | | **28-40** |
| | **Total Required Credits** | | **128** |

## Philosophy and Religion Major

| Philosophy and Religion Major Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **University Core Curriculum** | | | **22** |
| **General Education Requirements** | | | **30-42** |
| **Philosophy & Religion Major:** | | | **36** |
| **Philosophy Core** | | | **16** |
| PHIL 301 | History of Philosophy: Ancient/Medieval | 4 | |
| PHIL 302 | History of Philosophy: Modern/Contemp | 4 | |
| PHIL 311<br>PHIL 328 | Philosophy of Religion: Is God Knowable?<br>Metaphysics: What is Real? | 4 | |
| PHIL 351 | Logic | 4 | |
| **Philosophy Elective** | | | **4** |
| **Religion** | | | **16** |
| RELG 200 | Christian Ethics | 4 | |
| RELG 201<br>RELG 300W | Introduction to World Religions *or*<br>Rituals and Myths in World Religions | 4 | |
| RELG 441 | Early Biblical Interpretation | 4 | |
| RELG/PHIL 498W | Senior Seminar | 4 | |
| **General Electives** | | | **28-40** |
| | **Total Required Credits** | | **128** |

## Philosophy Minor

| Philosophy Minor Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Philosophy Core** | | | **8** |
| PHIL 301 | History of Philosophy: Ancient/Medieval | 4 | |
| PHIL 351 | Logic | 4 | |
| **Philosophy Electives*** | | | **12** |
| | **Total Required Credits** | | **20** |

*Students may also take POLS 315W.

## Courses

**PHIL 200 Christian Ethics (4)**
Examination of contemporary social-ethical issues in light of Christian ethical principles, derived from scripture, church history, and the history of philosophy. Co-listed as RELG 200. Offered: Fall.

**PHIL 241 Introduction to Philosophy (4)**
Examination of perennial questions and problems of life that have inspired philosophical investigation over the past 2,500 years.

**PHIL 301 History of Philosophy: Ancient and Medieval (4)**
Survey and examination of salient and influential ideas and representatives of the history of philosophy from pre-Socratic philosophers through the medieval period, presenting the significance and historical context of philosophical concerns. Offered: Fall.

**PHIL 302 History of Philosophy: Modern and Contemporary (4)**
Survey and examination of salient and influential ideas and representatives of the history of philosophy from the 17th century to the present, including the significance and historical context of philosophical concerns. Offered: Spring.

**PHIL 311 Philosophy of Religion: Is God Knowable? (4)**
Investigation of philosophical issues in religious thought, including such issues as proofs and disproves of God's existence, the meaning of religious language, truth-claims in different religions, and related matters. Co-listed as RELG 311. Offered: Fall, on rotation.

**PHIL 314 Ethics: Why be Moral? (4)**
Exploration of fundamental bases of morality by presenting and examining the salient features of virtue, duty, utilitarian ethics, and Divine Command ethics. Offered: Fall, on rotation.

**PHIL 321W Existentialism (4)**
Introduction to philosophical, theological, and literary aspects of such themes as human existence, anxiety, the individual in society, dread, and other issues. Offered: Spring, on rotation.

**PHIL 328 Metaphysics: What is Real? (4)**
Introduction to and examination of the philosophical study of the nature of reality, time, personal identity, consciousness, freedom, and other related issues. Offered: Spring, on rotation.

**PHIL 330 Medical Ethics (4)**
Introduction to the ethical issues in health care, medical research, and public policy, with ethical analyses of such issues as euthanasia, physician-assisted suicide, embryonic stem cell therapies, medical research on patients, abortion, in vitro fertilization, cloning, and the natural and civil rights to health care. Offered: Spring, on rotation.

**PHIL 351 Logic (4)**
Introduction to basic principles of correct reasoning, presenting criteria for sound, informal arguments and valid, deductive arguments. Offered: Spring.

**PHIL 491, 492, 493, and 494W Readings in Philosophy (1, 2, 3, and 4, respectively)**
Offered: As needed.

**PHIL 498W Seminar (4)**
Correlation of the various studies within the philosophy major, focusing on a senior assessment paper or subject. Offered: Spring.

# Physics

## Faculty

John T. Tarvin, Chair, Professor
Henry W. Glotfelty, Professor
Perry A. Tompkins, Professor

## Undergraduate Programs and Requirements

### Majors

Engineering Physics
Physics
Dual-Degree Engineering Program

### Minor

Physics

The Department of Physics offers two majors: physics (leading to a bachelor of science or bachelor of arts degree) and engineering physics (leading to a bachelor of science degree).

The department also offers a dual-degree engineering program in conjunction with the Department of Mathematics and Computer Science and the engineering schools of several regional universities. The five-year program leads to two degrees: a bachelor of science degree from Samford with a major in physics or mathematics, and a bachelor of engineering degree from the participating university. (See the Undergraduate Dual-Degree Engineering Program section below for more details.)

To obtain a major in physics, engineering physics, or through the dual degree program, students must maintain a minimum GPA of 2.50 in mathematics and physics courses. Additionally, to receive a bachelor of science degree in physics, but not through the dual degree program, students must complete a senior thesis. See the department chair for details.

The department also offers a minor in physics.

**University Core Curriculum and General Education Requirements**
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. For a major or minor in physics or a major in engineering physics, the general education mathematics requirements is satisfied by MATH 240 (Calculus I). Physics majors cannot use physics courses or COSC 107 (Introduction to Computer Science) to fulfill the general education natural and computational sciences requirement.

## Undergraduate Dual-Degree Engineering Program

The Department of Physics and the Department of Mathematics and Computer Science offer a dual-degree engineering program jointly with the following universities: University of Alabama at Birmingham, Auburn University, Washington University (Missouri) and Mercer University (Georgia). The five-year program leads to two degrees: a bachelor of science degree from Samford with a major in physics or mathematics, and a bachelor of engineering degree from the participating university.

Students in this five-year program will first pursue a three-year general curriculum at Samford, followed by a two-year general technical curriculum at one of the participating engineering schools. Students apply to the engineering school during their third year at Samford. Applications must include a letter of recommendation from the chair of the physics department or from the chair of the mathematics and computer science department (depending on the track selected), as well as documentation that the candidate will complete the required coursework at Samford. Candidates must satisfy the admission requirements for the participating engineering school, and should contact the school well in advance of application. The program consists of 96-108 credits at Samford (depending on placement in world languages). Both departments have checklists available for this program: one for the physics track and one for the mathematics track. Please see either department chair for further information.

### Physics Major (Bachelor of Science)

| Physics Major (BS) Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **30-42** |
| **Natural and Computational Sciences** | | **8** |
| **Social Sciences** | | **4** |
| **Mathematics** | | **4** |
| MATH 240 Calculus I | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Physics Major (Bachelor of Science):** | | **71-74** |
| **Physics Core** | | **30** |
| PHYS 203 Physics I | 5 | |
| PHYS 204 Physics II | 5 | |
| PHYS 310 Mechanics I | 3 | |
| PHYS 311 Mechanics I Laboratory | 1 | |
| PHYS 330 Electricity & Magnetism I | 3 | |
| PHYS 331 Electricity & Magnetism I Laboratory | 1 | |
| PHYS 350 Modern Physics I | 3 | |
| PHYS 351 Modern Physics I Laboratory | 1 | |
| PHYS 491 Seminar (complete four times) | 4 | |
| PHYS 499 Senior Thesis | 4 | |
| **Physics Electives** (select three upper-level courses | | **9-12** |
| [300 and above] with lab, if offered) | | |
| **Mathematics and Computer Science Core** | | **20** |
| COSC 110 Introduction to Programming | 4 | |
| MATH 240 Calculus I | 4 | |
| MATH 260 Calculus II | 4 | |
| MATH 270 Calculus III | 4 | |
| MATH 330 Differential Equations | 4 | |
| **Mathematics and Computer Science Electives** (select at least three) | | **12** |
| MATH 280 Intro to Advanced Mathematics* | 4 | |
| MATH 320 Numerical Analysis | 4 | |
| MATH 340 Linear Algebra | 4 | |
| MATH 350 Vector Calculus | 4 | |
| MATH 360 Complex Variables | 4 | |
| **General Electives** | | **0-5** |
| **Total Required Credits** | | **128-138** |

*COSC 200 (Discrete Structures for Computer Science) may be used to fulfill this requirement.

### Physics Minor

| Physics Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Physics Core** | | **10** |
| PHYS 203 Physics I | 5 | |
| PHYS 204 Physics II | 5 | |
| **Physics Electives** (Select three upper-level courses [300 and above] with lab, if offered) | | **9-12** |
| **Total Required Credits** | | **19-22** |

## Engineering Physics Major (Bachelor of Science)

| Engineering Physics Major (BS) Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **30-42** |
| **Natural and Computational Sciences** | | **8** |
| **Social Sciences** | | **4** |
| **Mathematics** | | **4** |
| MATH 240 Calculus I | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Engineering Physics Major:** | | **74-78** |
| **Physics Core** | | **26** |
| PHYS 203 Physics I | 5 | |
| PHYS 204 Physics II | 5 | |
| PHYS 310 Mechanics I | 3 | |
| PHYS 311 Mechanics I Laboratory | 1 | |
| PHYS 330 Electricity & Magnetism I | 3 | |
| PHYS 331 Electricity & Magnetism I Laboratory | 1 | |
| PHYS 350 Modern Physics I | 3 | |
| PHYS 351 Modern Physics I Laboratory | 1 | 1 |
| PHYS 491 Seminar (complete four times) | 4 | |
| **Physics Electives** (Select four upper-level courses [300 and above] with lab, if offered. Note that these courses can alternately be upper-level engineering courses taken at other schools. See department chair for details.) | | **12-16** |
| **Mathematics and Computer Science Core** | | **20** |
| COSC 110 Introduction to Programming | 4 | |
| MATH 240 Calculus I | 4 | |
| MATH 260 Calculus II | 4 | |
| MATH 270 Calculus III | 4 | |
| MATH 330 Differential Equations | 4 | |
| **Mathematics and Computer Science Electives** (select at least four) | | **16** |
| COSC 200 Discrete Structure for Computer Science* | 4 | |
| COSC 210 Data Structures & Algorithms | 4 | |
| MATH 320 Numerical Analysis | 4 | |
| MATH 340 Linear Algebra | 4 | |
| MATH 350 Vector Calculus | 4 | |
| MATH 360 Complex Variables | 4 | |
| **General Electives** | | **0-2** |
| **Total Required Credits** | | **128-142** |

*MATH 280 (Intro to Advanced Mathematics) may be used to fulfill this requirement.

## Physics Major (Bachelor of Arts)

| Physics Major (BA) Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements:** | | **30-42** |
| **Natural and Computational Sciences** | | **8** |
| **Social Sciences** | | **4** |
| **Mathematics** | | **4** |
| MATH 240 Calculus I | 4 | |
| **World Languages** | | **4-16** |
| **Fine Arts** | | **4** |
| **Humanities** | | **4** |
| **Physical Activity** | | **2** |
| **Physics Major (Bachelor of Arts):** | | **49-50** |
| **Physics Core** | | **26** |
| PHYS 203 Physics I | 5 | |
| PHYS 204 Physics II | 5 | |
| PHYS 310 Mechanics I | 3 | |
| PHYS 311 Mechanics I Laboratory | 1 | |
| PHYS 330 Electricity & Magnetism I | 3 | |
| PHYS 331 Electricity & Magnetism I Laboratory | 1 | |
| PHYS 350 Modern Physics I | 3 | |
| PHYS 351 Modern Physics I Laboratory | 1 | |
| PHYS 491 Seminar (complete four times) | 4 | |
| **Physics Electives** (select one upper-level course | | **3-4** |
| [300 and above] with lab, if offered) | | |
| **Mathematics and Computer Science** | | **20** |
| COSC 110 Introduction to Programming | 4 | |
| MATH 240 Calculus I | 4 | |
| MATH 260 Calculus II | 4 | |
| MATH 270 Calculus III | 4 | |
| MATH 330 Differential Equations | 4 | |
| **General Electives** (must be 300/400 level)* | | **14-27** |
| **Total Required Credits** | | **128** |

*General Electives in this program must be upper-level (300-499) in order to meet Samford's graduation requirement of 40 upper-level credits.

NOTE: Pre-Professional (i.e., Pre-Medicine, Pre-Dentistry, Pre-Optometry or Pre-Veterinary Medicine) must satisfy the requirements of a physics major, bachelor of arts degree. The bachelor of science degree designation can be obtained by a student if a commensurate number of science courses are completed in other departments in order to fulfill the pre-professional degree plan. In order to obtain this designation a candidate must obtain the approval of the physics department chair.

## Courses

**IDSC 201 Scientific Methods (4)**
Scientific approach to understanding the physical universe through an investigation of representative topics in physics, chemistry, and biology, paying particular attention to the sources of scientific information both for scientists and society. Interdisciplinary course taught by faculty in biology, chemistry, and physics. Meets general education requirement for natural and computational science. LEC 4. Prereq: Grade of C- or better in UCCA 102.

**PHYS 100 Physics for Society (4)**
Conceptual survey of all fields of physics, including modern developments, with an emphasis on the explanation of everyday physical phenomena. Not applicable to a major or minor in physics; closed to those who have had PHYS 101 or PHYS 203. Includes laboratory. Prereq: High school algebra. Offered: Most Jan Terms and summers.

**PHYS 101 and 102 General Physics I-II (4 each course)**
Study of Newtonian mechanics, heat, light, sound, electricity, magnetism, and relativity. Includes laboratory. Prereq for PHYS 101: Thorough understanding of algebra at the high school level. Prereq for PHYS 102: PHYS 101; elementary knowledge of trigonometry desirable though not required. Offered: Fall and Summer I (101); Spring and Summer 2 (102).

**PHYS 108 Exploring Physics for Education (4)**
How close can you fly a spaceship to a black hole? How small is a quark or an x-ray? How can you solidify water? And we don't mean freeze it! How cold is liquid air? How does a rocket work? This integrated lecture and laboratory course provides a hands-on learning experience to develop enhanced conceptual understanding of many topics in physics. Includes open discussions on selected topics to reward the curious student. Current trends in science-education pedagogy, including kit-based science, are also explored. Prereq: High school algebra. Offered: Most Jan Terms.

**PHYS 150 Introduction to Astronomy (4)**
Survey of the solar system, stars, and galaxies. Includes laboratory. Offered: Fall, Spring, and some summers.

**PHYS 203 and 204 Physics I-II (5 each course)**
Study of Newtonian mechanics, heat, light, sound, electricity, magnetism, and relativity using calculus. Includes laboratory.
Co-req for PHYS 203: MATH 240
Co-req for PHYS 204: MATH 260. Prereq for PHYS 204: PHYS 203.
Offered: Fall (203); Spring (204).

**PHYS 206 Sound and Music (4)**
Study of physical principles of production, transmission, and reception of sound. Course cannot count towards a physics major or minor. Includes laboratory. Prereq: High school algebra. Offered: See department chair.

**PHYS 310 Mechanics I (3)**
Study of classical mechanics, including motion of planets and comets about the sun, using vector calculus. Includes study of the methods of Lagrange and Hamilton. Prereq: PHYS 101 or PHYS 203, and MATH 270. Co-req: PHYS 311. Offered: Fall, on rotation.

**PHYS 311 Mechanics I Laboratory (1)**
Laboratory companion course to PHYS 310. Co-req: PHYS 310. Offered: Fall, on rotation.

**PHYS 330 Electricity and Magnetism I (3)**
Study of electromagnetic interaction, featuring Maxwell's equations. Prereq: MATH 270 and either PHYS 203 and 204, or PHYS 101 and 102. Co-req: PHYS 331W. Offered: Fall, on rotation.

**PHYS 331 Electricity and Magnetism I Laboratory (1)**
Laboratory companion course to PHYS 330. Co-req: PHYS 330. Offered: Fall, on rotation.

**PHYS 334W Electronics (4)**
Introduction to modern electronics. Includes laboratory. Prereq: PHYS 203 and 204 or PHYS 101 and 102. Offered: See department chair.

**PHYS 340 Optics (3)**
Introduction to optics. Prereq: PHYS 203 and 204 or PHYS 101 and 102; and MATH 260. Co-req: PHYS 341W. Offered: Spring, on rotation.

**PHYS 341 Optics Laboratory (1)**
Laboratory companion course to PHYS 340. Co-req: PHYS 340. Offered: Spring, on rotation.

**PHYS 350 Modern Physics I (3)**
Study of x-rays, atomic and nuclear physics, radioactivity, relativity, and quantum mechanics. Prereq: PHYS 203 and 204, or PHYS 101 and 102. Co-req: PHYS 351 and MATH 260. Offered: Spring, on rotation.

**PHYS 351 Modern Physics I Laboratory (1)**
Laboratory companion course to PHYS 350. Co-req: PHYS 350. Offered: Spring, on rotation.

**PHYS 360 Modern Physics II (3)**
Continued study of quantum mechanics from Modern Physics. Includes applications of quantum mechanics to atomic, nuclear, solid-state, and laser physics. Prereq: PHYS 350. Offered: Fall, on rotation.

**PHYS 380 Scientific Methods of Computer-Based Instrumentation (4)**
Survey of computer-based instrumentation and software/hardware integration used to develop experiments or tests. Covers laboratory programming using fourth-generation visual computer language, acquisition and conditioning of real-world signals, and control of ASCII conversation-based bench-top instruments. Prereq: PHYS 102 or PHYS 204 and COSC 110 or equivalent. Co-listed as CHEM 380 and COSC 380. Offered: Fall, on rotation.

**PHYS 408 International Physics Experience (4)**
Experimental course held in an international cross-cultural context, addressing both advanced physics topics and worldview defining experiences. Consists of a series of academic topics taught by Samford and possibly international professors in a setting outside the United States. Includes student projects completed in collaboration with other international undergraduate physics students. Prereq: Permission of the instructor. Offered: Jan Term.

**PHYS 410 Mechanics II (3)**
Continuation of PHYS 310 (Mechanics I). Prereq: PHYS 310 and MATH 330. Offered: See department chair.

**PHYS 420 Thermal Physics (3)**
Study of theories and concepts of thermodynamics, kinetic theory, and statistical mechanics, including Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics. Prereq: PHYS 203 and 204, or PHYS 101 and 102; and MATH 260. Offered: Spring, on rotation.

**PHYS 430 Electricity and Magnetism II (3)**
Continuation of PHYS 330 (Electricity and Magnetism I). Prereq: MATH 270 and PHYS 330. Offered: See department chair.

**PHYS 454 Quantum Mechanics (3)**
Study of the formulations of Schroedinger, Heisenberg, and Dirac. Includes applications to atomic and nuclear physics. Prereq: PHYS 360 and MATH 270 or permission of the department chair. Offered: See department chair.

Note on Special Problems courses: A maximum of five credits total for PHYS 461 through PHYS 481, inclusive, may count toward graduation requirements.

**PHYS 461 Special Problems (1)**
Intended primarily for juniors and seniors in the physical sciences and mathematics. Prereq: Permission of the department chair.

**PHYS 471 Special Problems (2)**
Prereq: Permission of the department chair.

**PHYS 481 Special Problems (3)**
Prereq: Permission of the department chair.

**PHYS 491 Seminar (1)**
Can be repeated up to six times for credit. Prereq: Permission of the department chair.

**PHYS 499 Senior Thesis (4)**
Capstone course and advanced research experience leading to a significant senior thesis in physics. Each student is required to design, conduct, analyze, write up, and present an original research project under the supervision of a faculty member. Experimental, theoretical, or computational physics topics are acceptable. Prereqs: Physics majors with senior standing and permission of the department chair. Offered: Fall and Spring.

# Political Science

## Faculty

Frederick M. Shepherd, Chair, Associate Professor
William P. Collins, Professor
Randolph C. Horn, Associate Professor
Tatyana A. Karaman, Assistant Professor

## Undergraduate Programs and Requirements

### Major
Political Science

### Minors
Political Science
Latin American Studies*

### Interdisciplinary Concentrations
International Relations
Public Administration
Latin American Studies*

The Department of Political Science offers a major in political science and interdisciplinary concentrations in international relations and public administration, each of which earns the bachelor of arts degree.

The department also offers a minor in political science.

### University Core Curriculum and General Education Requirements
See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Political science majors cannot use POLS 200 (Introduction to Political Science) for the general education social science requirement.

*See the World Languages and Cultures section for details on the Latin American studies minor and interdisciplinary concentration.

## Courses

**POLS 200 Introduction to Political Science (4)**
Introduction to the field of political science. Focus on political communities and the way in which groups organize to form governments. This is done in reference to the concept of democracy and the way in which political communities either attain or fall short of the democratic ideal. Required of political science majors. Offered: Fall and Spring.

**POLS 205 Introduction to American Politics (4)**
Survey of the structures and processes of the American political system with an emphasis on citizen participation. Required of political science majors.

**POLS 301 Methods and Practice of Political Science (4)**
Introduction to political science methods and research tactics. Emphasis on integration of qualitative and quantitative analysis. Required of political science majors. Offered: Spring.

**POLS 305 American National Government (4)**
Study of the political process in America, focusing on national political institutions. Subfield: American Politics.

**POLS 310W U. S. Foreign Policy (4)**
Review of the development of the cardinal principles of American foreign policy, the changing role of the United States in international relations, and historic aspects of American diplomacy. Subfields: American Politics and World Politics.

**POLS 312 State and Local Government (4)**
Study of the structure and functioning of various state and local governments. Subfield: American Politics.

**POLS 315 Topics in Political Theory (4)**
Intensive study of western political philosophy, presenting selected topics such as systems of thought (the classic Greeks, the democratic, the socialist) or time periods (medieval to Machiavellian, early modern to Rousseau, recent and contemporary). Four credits for each topic, maximum eight credits. Students may substitute PHIL 301 and 302 for 315. Subfield: Political Theory.

### Political Science Major

| Political Science Major Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Political Science Major:** | | **40** |
| **I. Foundation Courses** | | **12** |
| POLS 200 Introduction to Political Science | 4 | |
| POLS 205 Introduction to American Politics | 4 | |
| POLS 301 Methods & Practice of Political Science | 4 | |
| **II. Upper-Level Courses in Special Field** (select three) | | **12** |
| Select Special Field from the following subfields: World Politics, American Politics, or Political Theory. Upper-level courses may be designated in one or more Special Fields; this information is included at the end of each course description. | | |
| **III. Upper-Level Courses outside Special Field** | | **8** |
| Select one course each in two subfields other than the student's Special Field. These courses must be taught by political science faculty. | | |
| **IV. Upper-Level Elective** Select one upper-level course in any subfield. | | **4** |
| **V. Capstone** | | **4** |
| POLS 465W Senior Seminar | 4 | |
| **General Electives** | | **24-36** |
| **Total Required Credits** | | **128** |

### Public Administration Interdisciplinary Concentration
Public administration, an interdisciplinary concentration offered in cooperation with the School of Business, combines knowledge and experience from the worlds of politics and business. It includes a mandatory political science internship. As the table below demonstrates, it provides students with a broad array of courses from the political science department and the School of Business.

| Public Administration Interdisciplinary Concentration Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Public Administration Interdisciplinary Concentration:** | | **43-47** |
| **Political Science Core** | | **12-16** |
| POLS 205 Introduction to American Politics | 4 | |
| POLS 316 Public Administration | 4 | |
| POLS 460 Internship (pass/fail) | 4-8 | |
| **Political Science Electives** (Select three 300/400-level courses.) | | **12** |
| **Business*** | | **19** |
| ECON 201 Principles of Macroeconomics | 4 | |
| ECON 202 Principles of Microeconomics | 3 | |
| ACCT 211 Accounting Concepts I | 3 | |
| BUSA 252 Legal Environment of Business | 3 | |
| BUSA 303 Principles of Management | 3 | |
| BUSA 454W Business Law | 3 | |
| **General Electives** | | **17-33** |
| **Total Required Credits** | | **128** |

*Students must complete their college math requirements before beginning the sequence of business courses, and must complete their 200-level business courses before registering for upper-level business courses.

## International Relations Interdisciplinary Concentration

| International Relations Interdisciplinary Concentration Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **IREL Interdisciplinary Concentration:** | | **68-76** |
| **Economics** | | **4** |
| ECON 201 Principles of Macroeconomics | 4 | |
| **World Languages** | | **16** |
| (select four courses of language beyond intermediate) | 16 | |
| **History Core** | | **8** |
| HIST 200 The West in Global Perspective | 4 | |
| HIST 217 Early America to 1877 *or*<br>HIST 218 Modern America since 1865 | 4 | |
| **History Electives** | | **12** |
| (select three from the table at right) | 12 | |
| **Political Science Core** | | **8** |
| POLS 205 Introduction to American Politics | 4 | |
| POLS 319W International Relations | 4 | |
| **Political Science Electives** | | **12** |
| (select three from the table at right) | 12 | |
| **Recommended Electives*** | | **8-16** |
| **General Electives** | | **0-8** |
| **Total Required Credits** | | **128-140** |

* Eight to 16 foreign language credits are recommended. This option gives students the equivalent of a foreign language major.

## Political Science Minor

| Political Science Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Political Science Core** | | **8** |
| POLS 200 Introduction to Political Science | 4 | |
| POLS 205 Introduction to American Politics | 4 | |
| **Upper-Level Courses in Special Field**<br>(Select three upper-level courses, one in each of the subfields below.) | | **12** |
| American Politics | 4 | |
| Political Theory | 4 | |
| World Politics | 4 | |
| **Total Required Credits** | | **20** |

**POLS 316 Public Administration (4)**
Overview of the scope and methods of public administration, emphasizing political aspects. Reviews the growth and development of public administration as a field of intellectual inquiry; considers the role of administration in the political process and in policy-making; and examines the political relationships of the administrative environment. Subfield: American Politics.

**POLS 319W International Relations (4)**
Historical and analytical study of the U.S. and the international community since WWII, surveying the political, military, and economic struggles of the major powers and third-world nations. Subfields: Political Theory, World Politics.

**POLS 321 Post-Soviet Politics (4)**
Covers the post-Soviet region in its diverse geographic, historical, cultural, economic, and political settings. Examines the problems of building nations and states, democratizing authoritarian regimes, reforming command economies, and responding to new security threats. Subfield: World Politics.

## History and Political Science Electives for the International Relations Interdisciplinary Concentration

| International Relations Interdisciplinary Concentration History and Political Science Electives | Course Credits | Total Required Credits |
|---|---|---|
| **History Electives** (select three from the following) | | **12** |
| HIST 316 The Age of Revolutions | 4 | |
| HIST 317 Nationalism | 4 | |
| HIST 322 Early Twentieth Century Europe | 4 | |
| HIST 323 Recent European History | 4 | |
| HIST 399 London Study Topics | 4 | |
| HIST 421W Ancient Near East and Greece | 4 | |
| HIST 422 Roman Republic and Empire | 4 | |
| HIST 424 Early Modern England | 4 | |
| HIST 425W Modern England | 4 | |
| HIST 426W The Modern Middle East | 4 | |
| HIST 429 Old Russia | 4 | |
| HIST 431W Russia since 1861 | 4 | |
| HIST 434 Folklore: Europe to America | 4 | |
| HIST 438 Family, Sex, & Marriage in Modern England | 4 | |
| HIST 441 History of China to 1644 | 4 | |
| HIST 442 History of China since 1644 | 4 | |
| HIST 443 History of Modern Japan | 4 | |
| HIST 444 Asia's Response to the West | 4 | |
| HIST 456 Vietnam: An American Watershed | 4 | |
| HIST 461W Latin American History | 4 | |
| HIST 463 Monsoon Asia: Survey of Cultural History | 4 | |
| HIST 490 War and Society | 4 | |
| **Political Science Electives** (select three from the following) | | **12** |
| POLS 200 Introduction to Political Science | 4 | |
| POLS 310W U.S. Foreign Policy | 4 | |
| POLS 315 Topics in Political Theory | 4 | |
| POLS 321 Post-Soviet Politics | 4 | |
| POLS 322 Latin American Politics | 4 | |
| POLS 323 African Politics | 4 | |
| POLS 333 Genocide | 4 | |
| POLS 334 Terrorism | 4 | |
| POLS 351W European Politics | 4 | |
| POLS 363 Politics of Developing Nations | 4 | |
| POLS 370 Women and World Politics | 4 | |
| POLS 392W Africa: Land and People | 4 | |
| POLS 396 Latin America: Land and People | 4 | |
| POLS 450 Law and the World | 4 | |
| POLS 461W Research and Writing | 4 | |
| POLS 462W International Studies | 4 | |
| POLS 465W Senior Seminar in Political Science | 4 | |
| POLS 499 Special Topics in Political Science | 4 | |
| **Cross-Listed Electives**<br>(The following courses can count for either history or political science credit, but not both.) | | |
| HIST/POLS 348 Riots, Rebellion, and Revolution | 4 | |
| HIST/POLS 390 Monarch, Bishops, and Martyrs: The English Reformation | 4 | |
| HIST/POLS 393 Europe: Land and People | 4 | |
| HIST/POLS 395 Asia: Land and People | 4 | |
| HIST/POLS 451 Geography of International Affairs | 4 | |
| HIST/POLS 479 Rise of the British State | 4 | |

**POLS 322 Latin American Politics (4)**
Examination of the politics of Latin America. Compares and contrasts nations from the Caribbean, and North, Central, and South America. Uses history and theory to understand larger forces at work in these regions, and focuses on specific cases and accounts to bring out the human drama of Latin America. Subfield: World Politics.

**POLS 323 African Politics (4)**
Study of social, economic, and political dimensions of Africa from the nineteenth century to the present. Special focus on state-society relations. Subfield: World Politics.

**POLS 325 The Constitution and the Federalist Papers (4)**
Review of the United States Constitution and the Federalist Papers as an introduction to the ideas these founding documents represent. Subfields: Political Theory, American Politics.

**POLS 330 Classical Political Thought (4)**
Introduction to the most influential philosophical texts of the ancient world, with attention paid to the context of Greek cultural development. Subfield: Political Theory.

**POLS 333 Genocide (4)**
Study of genocide, working toward an understanding of what might seem impossible to understand: why people and institutions have attempted to exterminate a distinct racial, cultural or ethnic group; the conditions which give rise to these efforts; and the extent to which the world is becoming more or less hospitable to genocide. Subfield: World Politics.

**POLS 334 Terrorism (4)**
Examination of the theories, literature, and policies of terrorism and counterterrorism in order to understand better the contemporary terrorist's motivations and strategy. Subfield: World Politics.

**POLS 335 Medieval and Christian Political Theory (4)**
Close reading of original texts with a view to gaining insight into the medieval approach to learning. Focus on Thomas Aquinas' view of Natural Law. Themes of medieval political life are described in light of Thomas' union of classical and Christian themes. Subfield: Political Theory.

**POLS 337 Elections and Political Participation (4)**
Study of electoral behavior and other forms of political participation, including questions about who votes and why, what influences voter choice, and whether changes in turnout influence policy. Subfield: American Politics.

**POLS 340 Political Parties and Interest Groups (4)**
Examination of the historical development, current development, institutional ramifications, and central explanatory theories of the most pervasive conduits of mass political participation, political parties, and interest groups. Subfield: American Politics.

**POLS 345 Modern Political Theory (4)**
Introduction to the major texts in modern political theory. Focus on interpretation of the most influential texts of the modern period, beginning with Machiavelli and concluding with Marx, with attention paid to the context of European cultural, economic, and political development. Subfield: Political Theory.

**POLS 348 Riots, Rebellion, and Revolution (4)**
Comparison of the English, French, Russian, and Chinese Revolutions, with a goal of understanding the political factors involved in radical political change. Co-listed as HIST 348. Offered: Jan Term, on rotation. Subfield: Political Theory, World Politics.

**POLS 350 Impeachment (4)**
Study of impeachment procedures. Addresses issuing of articles of impeachment by the United States House of Representatives and trial by the United States Senate. Offered: Jan Term. Subfield: American Politics.

**POLS 351W European Politics (4)**
Descriptions of structure; analysis of functioning. Subfield: World Politics.

**POLS 355 Politics in Film (4)**
In-depth assessment of the treatment of political themes in film. Subfield: American Politics.

**POLS 360 Urban Geography (4)**
Geographic perspective of the past, present, and future of the American city. Topics include the historic roots of cities, development of the U.S. urban system, transportation, and the shaping of cities; social, political, and economic dynamics of urban areas; urban growth, decline, and revitalization; suburbanization; and challenges facing cities in the twenty-first century. Co-listed as GEOG 360 and SOCI 360. Offered: Spring. Subfield: American Politics.

**POLS 363 Politics of Developing Nations (4)**
Study of the developing nations in Asia, Africa, and Latin America. Examination of their societies, the impact of European Colonialism, and their problems since independence. Subfield: World Politics.

**POLS 365 Women in U.S. Politics (4)**
Examination of how the U.S. Government's relationship to its female citizens has changed through the years and how important gender is in determining political attitudes and participation. Students encounter and assess competing perspectives on current issues in women's and gender politics. Subfield: American Politics.

**POLS 370 Women and World Politics (4)**
Investigation of contemporary women's issues in world politics, with emphasis on cultural politics, women and development, gender and war, and civil and human rights for women. Students may take this course for either political science or Christian women's leadership credit. Subfield: World Politics.

**POLS 390 Monarchs, Bishops, and Martyrs: The English Reformation (4)**
Study of historical and religious factors of the English Reformation. Course is taught in London with visits to historical sites. Co-listed as HIST 390 and RELG 390. Subfield: World Politics.

**POLS 392W Africa: Land and People (4)**
Regional exploration of the entire African continent, focusing on the physical structure, cultural patterns, population distribution, political evolution, resource bases, and economic activities that give character to the continent. Co-listed as GEOG 392W. Subfield: World Politics.

**POLS 393 Europe: Land and People (4)**
In-depth analysis of landforms, and cultural, political, and economic factors that shape the character of the region. Co-listed as GEOG 393 and HIST 393. Offered: On rotation. Subfield: World Politics.

**POLS 394 International Studies in Economics (3)**
Cross-disciplinary introduction to the scope, causes, and consequences of poverty. Examination of the various measures of poverty as well as basic economic theory, explaining differences in income, wealth, and economic growth among regions. Emphasis on understanding poverty issues from a Biblical perspective. Course relies heavily on site visits to observe a wide variety of anti-poverty projects, including faith-based organizations and international nonprofit agencies. International travel required. Co-listed as ECON 394. Offered: Jan Term.

**POLS 395 Asia: Land and People (4)**
Regional analysis of the Asian continent focusing on the spatial patterns of physical structure, culture, environment, history, and politics which characterize the region. Co-listed as GEOG 395 and HIST 395. Offered: On rotation. Subfield: World Politics.

**POLS 396 Latin America: Land and People (4)**
Regional exploration of Latin America, focusing on the cultural, historical, environmental, economic, and political spatial patterns that give character to the region. Co-listed as GEOG 396. Prereq: Junior standing or demonstration of academic maturity. Offered: Fall. Subfield: World Politics.

**POLS 398 The Alabama Constitution: 100 Years of Controversy (4)**
Examination of the creation, structure, and interpretation of state constitutions. Special attention paid to the 1901 Alabama Constitution and issues surrounding the document as well as to current and past reform movements. Co-listed as HIST 398 and JMC 398. Subfield: American Politics.

**POLS 410 Game Theory (4)**
Elementary examination of the theory of games and strategic behavior with an emphasis on applications. Topics discussed include strategic form games, extensive form games, and games of asymmetric and incomplete information. Various equilibrium concepts also discussed. The course will apply game theoretic concepts to strategic behavior in the social sciences, particularly economics and political science, with applications ranging from cartel behavior to international diplomacy. Co-listed as ECON 410. Prereq: BUSA 130 or POLS 301. Offered: Fall, on rotation.

**POLS 435W Legislative Process (4)**
Study of state and national legislatures, their internal structures, constituents, and legislators. Subfield: American Politics.

**POLS 443W American Public Policy (4)**
Examination of the major political, social, economic, and technological forces influencing and shaping the nature, content, and outcomes of public policy in the United States. Subfield: American Politics.

**POLS 444 Introduction to Jurisprudence (4)**
Introduction to standard approaches to jurisprudence and their various applications to the legal and political world. Offered: Spring. Subfield: Political Theory, American Politics.

**POLS 445W Constitutional History of the United States (4)**
Review of the development of the basic concepts of American constitutional law. Co-listed as HIST 445W. Subfield: Political Theory, American Politics.

**POLS 447 The Development of American Law (4)**
Review of the development of American Law. Co-listed as HIST 447. Subfield: American Politics.

**POLS 450 Law and the World (4)**
Introduction to the complex issues involved in comparing the various legal systems around the world. Subfield: World Politics.

**POLS 451 Geography of International Affairs (4)**
Analysis of spatial elements of international affairs. Investigation of the development of states, boundary conflicts, and other geographic elements such as population, resources, and international trade. Co-listed as HIST 451. Offered: Spring. Subfield: World Politics.

**POLS 460 Internship (2-4)**
Student internships in local, state, national, and international offices and agencies under supervision of the instructor. Variable credit; can be taken more than once for maximum of eight credits. Grading is pass/fail only.

**POLS 461W Research and Writing (4)**
Study of methods and techniques used in various aspects of political science, including bibliography, primary and secondary sources, statistics, computerized materials, etc.

**POLS 462W International Studies (4)**
Independently arranged study from a first-hand, on-site perspective of an international organization, foreign country or countries, or direct involvement in an international study program in the United States. Prereq: Permission of the department chair. Subfield: World Politics.

**POLS 465W Senior Seminar in Political Science (4)**
Capstone course for political science and international relations majors in research and methodology of those fields. Required of political science majors. Offered: Fall.

**POLS 479 Rise of the British State (4)**
Examination of the emergence of the national government in Britain over the last 500 years through the lens of government's growing impact on citizens' daily life. Co-listed as HIST 479. Offered: Jan Term, in London.

**POLS 499 Special Topics in Political Science (4)**
Unique, one-time courses offered either by visiting professors or as experimental advanced courses by members of the department.

# Psychology

## Faculty

Stephen L. Chew, Chair, Professor
Jacqueline Goldstein, Professor
A. Sandra Willis, Professor
Nicole Siegfried, Associate Professor

## Undergraduate Programs and Requirements

| Major | Minor |
|---|---|
| Psychology | Psychology |

The Department of Psychology offers a major in psychology leading to a bachelor of arts degree. The department also offers a minor in psychology. Students are required to take at least half of their psychology courses at Samford to earn a major or minor in psychology.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. For psychology majors, the following exceptions and recommendations to the general education requirements apply:

Natural/Computational Sciences: BIOL 110 (Human Biology) or BIOL 105 (General Biology) is recommended, especially for students planning to take PSYC 308 (Physiological Psychology). However, neither biology course is a prerequisite for PSYC 308.

Social Sciences: PSYC 101 (General Psychology) cannot be used to fulfill this general education requirement. It must be fulfilled with a course from a social science field other than psychology.

Mathematics: MATH 210 (Elementary Statistics) is a prerequisite for PSYC 305 (Statistics for the Social Sciences). Students with a strong high school algebra background should be able to take MATH 210 to fulfill the mathematics requirement. Students with weaker math backgrounds should consult with their advisor before taking a general education mathematics course. For students who have shown strong math skills (for example, successfully completing MATH 240 [Calculus I]) or successfully completing one of the other general education mathematics courses with a good grade, the prerequisite of MATH 210 for PSYC 305 may be waived by permission of the instructor.

### Psychology Major

Courses should be selected in consultation with an advisor and in accordance to students' interests and career goals. The psychology major does not require a minor in any other discipline; however, students are encouraged to select a minor or a concentration of courses that will complement their interests, and educational and career goals.

Students typically take PSYC 305 (Statistics for the Social Sciences) and PSYC 306 (Research Methods) as a sequence during their junior year.

Students who take both PSYC 205 (Life-Span Development) and PSYC 210 (Child and Adolescent Psychology) may count only one of them toward the major or minor.

Students who intend to pursue graduate study and a career in psychology or a related area should take PSYC 301 (Internship) and/or PSYC 401 (Journal Seminar). These courses will help students to explore career options, gain pre-professional experience, and prepare for graduate work. PSYC 301 and PSYC 401 may be taken on a pass/fail basis only and will not count toward the major or minor. Students may take PSYC 401 more than once for credit. Students may take PSYC 301 up to two times for credit, as long as the internship placements differ.

Students may take PSYC 411 (Special Topics in Psychology) more than once if the topics are different and with permission of the department chair.

Elective courses are not offered on a regular basis but are taught as student interest dictates and faculty resources allow.

## Psychology Major

| Psychology Major Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Psychology Major:** | | **40** |
| **I. Fundamental Knowledge and Skills** | | **12** |
| PSYC 101 General Psychology | 4 | |
| PSYC 305 Statistics for the Social Sciences | 4 | |
| PSYC 306W Research Methods | 4 | |
| **II. Human Development and Interaction** (select two courses) | | **8** |
| PSYC 205 Life-Span Development | 4 | |
| PSYC 215 Abnormal Psychology | 4 | |
| PSYC 304 Social Psychology | 4 | |
| **III.Experimental Psychology** (select two courses) | | **8** |
| PSYC 308 Physiological Psychology | 4 | |
| PSYC 408 Theories of Learning | 4 | |
| PSYC 409 Cognitive Psychology | 4 | |
| **IV.Electives*** (select two courses) | | **8** |
| PSYC 203 Psychology of Adjustment | 4 | |
| PSYC 210 Child and Adolescent Psychology | 4 | |
| PSYC 220 Theories of Personality | 4 | |
| PSYC 310 Applied Psychology | 4 | |
| PSYC 312 Drugs and Human Behavior | 4 | |
| PSYC 320 Health Psychology | 4 | |
| PSYC 324 Human Sexuality | 4 | |
| PSYC 402 History of Psychology | 4 | |
| PSYC 404 Approaches to Counseling & Psychotherapy | 4 | |
| PSYC 405 Measurement and Assessment | 4 | |
| PSYC 411 Special Topics in Psychology | 2-4 | |
| **V. Capstone Experience** (select one course) | | **4** |
| PSYC 410W Directed Research | 4 | |
| PSYC 412W Senior Seminar | 4 | |
| **General Electives** | | **24-36** |
| **Total Required Credits** | | **128** |

*Any of the courses listed under Human Development and Interaction (II) and Experimental Psychology (III) not taken to fulfill a requirement may also count as electives with one restriction: only PSYC 205 or PSYC 210, but not both, may count towards the major or minor.

## Psychology Minor

| Psychology Minor Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Psychology Core** | | **4** |
| PSYC 101 General Psychology | 4 | |
| **Psychology Electives** (Include two upper-level [300-400] courses.) | | **20** |
| **Total Required Credits** | | **24** |

## Courses

**PSYC 101 General Psychology (4)**
Comprehensive overview of the scientific study of behavior and mental processes. Topics include neuroscience, sensation and perception, learning, cognition, development, personality, behavior disorders, psychotherapy, and social psychology. This course is a prerequisite for all other courses in psychology. Psychology majors may not use this course to meet the general education social science requirement. Offered: Fall and Spring.

**PSYC 203 Psychology of Adjustment (4)**
Study of adaptation to life and psychological growth. Includes analysis of adjustment to life stressors and attention to personal growth. Prereq: PSYC 101.

**PSYC 205 Life-Span Development (4)**
Survey of the development of human thought and behavior from conception to death. Emphasis is placed on the physical, moral, social, emotional, and cognitive developmental tasks at each phase of the life span. Students who take both this course and PSYC 210 may count only one of them toward the major or minor. Prereq: PSYC 101. Offered: Fall and Spring.

**PSYC 210 Child and Adolescent Psychology (4)**
Examination of psychological development from conception through adolescence. This course focuses on the various influences on development and on the characteristic social, cognitive, and perceptual functioning during the pre-adult life span. Students who take both this course and PSYC 205 may count only one of them toward the major or minor. Prereq: PSYC 101.

**PSYC 215 Abnormal Psychology (4)**
Study of the symptomatology, etiology, epidemiology, and treatment of psychological disorders. Includes focus on current research and theory. Prereq: PSYC 101. Offered: Spring.

**PSYC 220 Theories of Personality (4)**
Exploration of the theory and assessment of human personality. Examination of specific theoretical perspectives, including psychodynamic, trait, humanistic, and social learning perspectives. Prereq: PSYC 101.

**PSYC 301 Internship (2-4)**
Observation and/or work with professionals in any approved setting where psychologists, or similarly trained professionals, are employed. An academic component complements the work experience. Students may take this course up to two times for credit, as long as internship placements differ. This course does not count toward the psychology major or minor. Grading is pass/fail only. Prereq: Twelve credits in psychology and permission of the instructor. Offered: Fall and Spring.

**PSYC 304 Social Psychology (4)**
Examination of the influence of social context on an individual's thoughts and behavior. Topics covered include social perception and cognition, attribution, attitude formation, prejudice and discrimination, interpersonal attraction and relationships, social influence, prosocial behavior, and aggression. Research seeks to understand causes of social behavior and thought by scientific study of cognitive processes, biological factors, behavior and characteristics of others, culture, and physical environment. Prereq: Eight credits in psychology or permission of the instructor. Offered: Fall.

**PSYC 305 Statistics for the Social Sciences (4)**
Acquisition of fundamental statistical skills for describing and analyzing data within the social sciences. Emphasis on the appropriate application of these methods for designing, conducting, and interpreting research. This course and PSYC 306 form a two-semester sequence on experimental design and methodology. Prereqs: Eight credits in psychology, completion of general education mathematics requirement, and either MATH 210 or permission of the instructor. Offered: Fall.

**PSYC 306W Research Methods (4)**
Study and implementation of all phases of psychological research. Includes literature searches, experimental design, data collection, and statistical analysis, as well as both written and oral presentations of psychological research. Prereq: Twelve credits in psychology and PSYC 305. Offered: Spring.

**PSYC 308 Physiological Psychology (4)**
Examination of the physiological basis of thought and behavior through a thorough study of the anatomy and physiology of the nervous system, particularly the processing of sensation and movement. Emphasis also placed on the neural mechanisms underlying behaviors related to sleep and rhythms, hunger and thirst, reproduction, learning, emotion, and mental illness. Prereq: Eight credits in psychology. Offered: Fall.

**PSYC 310 Applied Psychology (4)**
Overview of different ways in which psychological theory and research are applied to real world situations. Topics of study generally include business and industrial applications such as industrial/organizational psychology and human factors, community applications such as health and environmental psychology, and human development applications such as educational and sport psychology. Prereq: Eight credits in psychology.

**PSYC 312 Drugs and Human Behavior (4)**
Survey of factors related to both therapeutic and recreational use of psychoactive drugs. Physiological mechanisms as well as psychosocial and cultural issues are examined. Emphasis placed on using scientific research to separate myth from reality. Prereq: Eight credits in psychology.

**PSYC 320 Health Psychology (4)**
Examination of the effects of psychological factors on health and illness. Health psychology emerged as an interdisciplinary subfield of social psychology and medicine after it became apparent that the leading causes of death are chronic diseases closely related with individual behaviors and lifestyles. Research within this biopsychosocial approach helps to promote physical and mental health and to prevent and treat disease. Prereq: Eight credits in psychology. Offered: Fall.

**PSYC 324 Human Sexuality (4)**
Examination of human sexuality from multidisciplinary perspectives. Students study the biological, spiritual, psychosocial, and cultural dimensions of sexuality. This course is cross-listed with sociology, but may only be counted toward one major or minor. To count toward the psychology major or minor, students must register for the course as a psychology course or obtain permission from the department chair. Co-listed as SOCI 324. Prereq for psychology credit: PSYC 101.

**PSYC 401 Journal Seminar (1)**
Discussion and critical analysis of original research articles with faculty in a seminar format. Objectives include teaching students how to read and critique primary source articles in preparation for graduate-level work. This course may be taken more than once for credit, but does not count toward the psychology major or minor. Grading is pass/fail. Prereq: Twelve credits in psychology and permission of the instructor. Offered: Fall and Spring.

**PSYC 402 History of Psychology (4)**
Examination of the study of behavior from an historical perspective. Development of current systems of psychological thought is traced from the pre-Greeks through the major periods of history. Prereq: Twelve credits in psychology.

**PSYC 404 Approaches to Counseling and Psychotherapy (4)**
Exploration of theory and clinical applications of psychotherapy and treatment of psychological disorders. Includes an overview of counseling theories and application of these concepts as well as an exploration of professional issues in clinical practice. This course is intended for advanced psychology majors. Prereqs: Psychology major with upper-level standing, eight credits of upper-level psychology, PSYC 215, and permission of the instructor. Offered: Spring.

**PSYC 405 Measurement and Assessment (4)**
Study of the process of mental measurement and assessment of human characteristics and performance. Includes examination of test construction and processes to measure psychological adjustment and functioning, intelligence and educational achievement, personality, attitude, vocational interest, and occupational functioning. Psychometric research aims to improve validity of measures used in basic psychological research and applied in clinical, educational, and industrial/occupational settings. Prereqs: Twelve credits in psychology and PSYC 305.

**PSYC 408 Theories of Learning (4)**
Overview of the major theories of learning, with a focus on historical influences and current applications. Includes training and application of learning principles. Prereqs: Twelve credits in psychology. Offered: Fall.

**PSYC 409 Cognitive Psychology (4)**
Comprehensive introduction to the study of human thought processes such as learning, attention, encoding, remembering, and forgetting. Special topics such as language, imagery, artificial intelligence, cognitive neuroscience, problem solving and decision making are also considered. Prereq: Eight credits of upper-level psychology. Offered: Spring.

**PSYC 410W Directed Research (4)**
Senior capstone course that provides students with an individualized, advanced research experience. Under the supervisions of a faculty mentor, students review literature, design and conduct an original research project, and analyze data using computer statistical software. Students interpret and write up results within APA format and make an oral presentation of the study. Prereq: Psychology major or minor with senior standing and completion of PSYC 306, or permission of the instructor. Offered: Fall.

**PSYC 411 Special Topics in Psychology (2-4)**
Coverage of a particular topic in psychology that is not normally examined in depth in the regular course offerings. Designed to teach students about a special research interest of a faculty member or a newly emerging area of psychology. Topics vary with each instructor. This course may be taken more than once for credit, if topics are different, with permission of the department chair. Prereq: Junior standing and eight credits of upper-level psychology or permission of the instructor.

**PSYC 412W Senior Seminar (4)**
Senior capstone course in seminar format. Integration of theories and research presented in previous psychology courses, while providing opportunities to design and conduct an applied research study and to explore post-baccalaureate career and educational goals. Specific course content and format varies to remain topical and applicable to student and instructor interests. Students planning to graduate in December may take this course in the spring semester of their junior year. Prereq: Psychology major or minor with senior standing or permission of the instructor. Offered: Spring.

# Religion

## Faculty

Kenneth B.E. Roxburgh, Chair, S. Louis and Ann W. Armstrong Professor
Penny L. Marler, Professor
David R. Bains, Associate Professor
James R. Barnette, Associate Professor
T. Scott McGinnis, Assistant Professor
Joseph F. Scrivner, Instructor

## Undergraduate Programs and Requirements

### Majors

Religion
Religion with a Concentration in Congregational Studies

### Minors

Ministry and Missions
Religion

The Department of Religion offers two majors: religion and, for students preparing for a career in ministry, religion with a concentration in congregational studies. Both majors earn the bachelor of arts degree. The department also offers two minors: one in religion and another in ministry and missions.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Students cannot use RELG 200 (Christian Ethics), RELG 201 (Introduction to World Religions), or RELG 221 (Christian Theology) to count towards both the general education humanities requirement and the religion major or minor requirement.

### Congregational Studies Concentration

The department offers a concentration in congregational studies within the religion major for students preparing for a career in ministry. Students who intend to concentrate in congregational studies must choose at least one course in Area I, at least one course in Areas II and III, and three courses in Area IV. In addition, religion majors with a concentration in congregational studies have the option of completing RELG 499 (Senior Seminar in Congregational Ministry) instead of RELG 498W (Senior Seminar).

## Courses

### BIBLICAL LANGUAGES

**HEBR 101 Hebrew I (4)**
Introduction to grammar and syntax of Old Testament Hebrew using the interpretative translation of several chapters of the Old Testament. Offered: Fall.

**HEBR 102 Hebrew II (4)**
Advanced study beyond elementary Hebrew using the translation and exegesis of Old Testament material. Offered: Spring.

**GREEK - Greek is offered through the Classics program.**
Note: May take one year of Greek, plus one year of Hebrew, in lieu of two years of same language.

### Religion Major

| Religion Major Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Religion Major:** | | **36** |
| **Religion Core** | | **16** |
| RELG 201 Introduction to World Religions | 4 | |
| RELG 320 Studies in the Law-Torah *or* RELG 350 Jesus and the Gospels | 4 | |
| RELG 371W Research/Writing in Religious Studies | 4 | |
| RELG 498W Senior Seminar | 4 | |
| **Choose one course each from three of the following four areas:** | | **12** |
| **Area I. Jewish and Christian Scriptures** | | |
| RELG 320 Studies in the Law-Torah | 4 | |
| RELG 321 Studies in the Psalms/Wisdom Literature | 4 | |
| RELG 331 Studies in the Prophets | 4 | |
| RELG 341 Martyrdom and Apocalypticism | 4 | |
| RELG 342W Life and Letters of Paul | 4 | |
| RELG 343 The Johannine Writings | 4 | |
| RELG 345 Varieties of Ancient Paganism | 4 | |
| RELG 350 Jesus and the Gospels | 4 | |
| RELG 441 Early Biblical Interpretation | 4 | |
| **Area II. Historical/Cultural Studies** | | |
| RELG 300W Rituals/Myths in World Religions | 4 | |
| RELG 302W History of Christianity | 4 | |
| RELG 304W History of Christianity in America | 4 | |
| RELG/PHIL 311 Philosophy of Religion | 4 | |
| RELG 312 Christian Worship: History & Theology* | 4 | |
| RELG/SOCI 333 Sociology of Religion | 4 | |
| RELG/HIST 433W Baptists: Their History & Theology | 4 | |
| **Area III. Theological/Ethical Studies** | | |
| RELG 200 Christian Ethics | 4 | |
| RELG 221 Christian Theology | 4 | |
| RELG 312 Christian Worship: History & Theology* | 4 | |
| RELG 314W Christian Spirituality | 4 | |
| RELG 351W Contemporary Theology | 4 | |
| RELG 354 Pastoral Theology** | 4 | |
| **Area IV. Practice of Ministry** | | |
| RELG 204 Formation for Christian Ministry | 4 | |
| RELG 210 Foundations of Congregational Studies | 4 | |
| RELG 250 Practice of Ministry Internship | 1 | |
| RELG 310 Theories of Faith Development | 4 | |
| RELG 312 Christian Worship: History & Theology* | 4 | |
| RELG 313W Preaching | 4 | |
| RELG 354 Pastoral Theology** | 4 | |
| RELG 355 Missiology | 4 | |
| RELG 361 Pastoral Care and Counseling | 4 | |
| **Religion Electives** (choose two) | | **8** |
| **General Electives** | | **28-40** |
| **Total Required Credits** | | **128** |

*RELG 312 may be used to satisfy Area II, III or IV, but not all three simultaneously.
**RELG 354 may be used to satisfy either Area III or IV, but not both simultaneously.

## Ministry and Missions Minor

For the minor in ministry and missions, students must take RELG 201 (Introduction to World Religions), and either RELG 354 (Pastoral Theology) or RELG 355 (Missiology), and three other courses from Area IV for a total of 20 hours. RELG 499 (Senior Seminar in Congregational Ministry) may be substituted for one Area IV requirement **with permission of the professor.**

| Ministry & Missions Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Religion Core** | | **8** |
| RELG 201 Introduction to World Religions | 4 | |
| RELG 354 Pastoral Theology *or*<br>RELG 355 Missiology | 4 | |
| **Religion Electives** (from Area IV: Practice of Ministry) | | **12** |
| (select three courses) | | |
| RELG 204 Formation of Christian Ministry | 4 | |
| RELG 210 Foundations of Congregational Studies | 4 | |
| RELG 250 Practice of Ministry Internship | 1 | |
| RELG 310 Theories of Faith Development | 4 | |
| RELG 312 Christian Worship: History & Theology* | 4 | |
| RELG 313W Preaching | 4 | |
| RELG 354 Pastoral Theology** | 4 | |
| RELG 355 Missiology | 4 | |
| RELG 361 Pastoral Care and Counseling | 4 | |
| **Total Required Credits** | | **20** |

## Religion Minor

| Religion Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **Religion Core** | | **4** |
| RELG 201 Introduction to World Religions | 4 | |
| **Religion Electives** | | **16** |
| (At least 12 credit hours must<br>be at the 300 level or above.) | | |
| **Total Required Credits** | | **20** |

## RELIGION

**UCBP 101 Biblical Perspectives (4)**
Examination of historical context and religious teachings of Hebrew and Christian Scriptures. Cultivation of critical competencies necessary for the academic study of traditional texts. Course objectives include an understanding of the historical context in which the Bible took shape; appreciation of the development of religious thought within the biblical period; examination of how biblical teachings have been and are interpreted and applied; and study of the Bible, using a variety of modern critical methods, including Historical, Social Scientific, and Cultural Criticism (i.e., Feminist, African-American, or Post-Colonial Criticism). Offered: Every semester.

**RELG 200 Christian Ethics (4)**
Examination of contemporary social-ethical issues in light of Christian ethical principles, derived from scripture and church history. Co-listed as PHIL 200. Offered: Fall.

**RELG 201 Introduction to World Religions (4)**
Investigation of the major world religions, emphasizing their distinctive histories, beliefs, and practices. Offered: Fall and Spring.

**RELG 204 Formation for Christian Ministry (4)**
Designed for persons seeking to understand and interpret their call to ministry. Offered: Spring.

**RELG 210 Foundations of Congregational Studies (4)**
Introduction to a framework for understanding the unique dynamics of congregational life. Prereqs: UCCA 102 and UCCP 102. Offered: Fall.

**RELG 221 Christian Theology (4)**
Survey of the historical development and contemporary interpretation of the main teachings of Christian faith. Offered: Fall and Spring.

**RELG 250 Practice of Ministry Internship (1)**
Integration of disciplinary learning and workplace experience through directed assignments in a Practice of Ministry course and supervision of related activities in a church or church-related setting. Prereq: Permission of the instructor. Co-req: Choose from the following: RELG 204, 210, 310, 312, 354, or 355.

**RELG 300W Rituals and Myths in World Religions (4)**
Thematic introduction to world religions, focusing on rituals and myths. Exploration of how various religious traditions seek to order human life and how modern scholars have attempted to understand religions. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 302W History of Christianity (4)**
Survey of the history of Christianity, acquainting students with the institutional and cultural heritage of the Christian church. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Fall, on rotation.

**RELG 304W History of Christianity in America (4)**
Survey of the history of Christianity in American life and culture with emphasis on the history and doctrines of denominations. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Fall.

**RELG 310 Theories of Faith Development (4)**
Examination of contemporary theories of faith development. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 311 Philosophy of Religion: Is God Knowable? (4)**
Investigation of philosophical issues in religious thought, including such issues as proofs and disproves of God's existence, the meaning of religious language, truth-claims in different religions, and related matters. Co-listed as PHIL 311. Offered: Fall, on rotation.

**RELG 312 Christian Worship: History and Theology (4)**
Survey of the history, theology, and contemporary diversity of Christian worship. Examination of key issues in the development and practice of Christian worship through theological and liturgical texts and participant observation. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring, on rotation.

**RELG 313W Preaching (4)**
Examination of the principles of Biblical preaching, with a view of moving from the text to the sermon, including the disciplines of sermon preparation and delivery. Prereqs: UCBP 101 and UCCA 102. Offered: Spring.

**RELG 314W Christian Spirituality (4)**
Study of the major works on Christian spirituality, with a goal to gaining knowledge of and appreciation for the spiritual tradition in the church. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Jan Term.

**RELG 320 Studies in the Law-Torah (4)**
Examination of the content, literary makeup, and historical context of the Law-Torah. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor.

**RELG 321 Studies in the Psalms and Wisdom Literature of the Old Testament (4)**
Examination of the literary character and function of the Psalms in Israel, including analysis of the literary masterpiece and spiritual classic known as Job. Also includes review of Proverbs, Ecclesiastes, and other poetical books. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 331 Studies in the Prophets (4)**
Exploration of the background and message of Israel's great preachers, the major and minor prophets of the Old Testament, and the relevance of their insights for today. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor.

**RELG 333 Sociology of Religion (4)**
Analysis of beliefs, practices, and the organized expression of religion and society. Co-listed as SOCI 333. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 341 Martyrdom and Apocalypticism (4)**
Examination of later writings of the New Testament against the background of the church's precarious position in the late first century and of Greco-Roman culture. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Fall.

**RELG 342W Life and Letters of Paul (4)**
Introduction to the historical-critical study of Paul and his letters. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 343 The Johannine Writings (4)**
Introduction to the historical critical study of the Gospel and Letters of John, with attention to the community behind these documents, as well as the reception of these documents among the early Christians. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Jan Term.

**RELG 345 Varieties of Ancient Paganism from Alexander to Julian (4)**
Introduction to the major pagan religions of the Greco-Roman period, from the conquests of Alexander the Great (332 BCE) to the death of Julian the Apostate (363 CE). Some attention is paid to the pagan influences on emerging Judaism and Christianity. Co-listed as CLAS 345. Offered: Spring, on rotation.

**RELG 350 Jesus and the Gospels (4)**
Introduction to the historical-critical study of the gospels, focusing on the synoptic Problem and the Historical Jesus. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 351W Contemporary Theology (4)**
Examination of important theological movements of the modern era with an emphasis on church-related theologians. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor.

**RELG 354 Pastoral Theology (4)**
Exploration of the nature of pastoral ministry in the cultural context of the twenty-first century, focusing on the biblical, historical, and theological foundations of pastoral care. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor.

**RELG 355 Missiology (4)**
Introduction to missiology, focusing on its biblical, historical, and theological foundations, in order to explore the mission of God in the cultural context of the 21st century.

**RELG 361 Pastoral Care (4)**
Internship in hospital chaplaincy with Princeton Baptist Medical Center. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Jan Term.

**RELG 371W Research and Writing in Religious Studies (4)**
Development of analytical, research, and writing skills in religious studies in a small seminar format. Students engage in reading and analysis of both primary and secondary materials and complete a directed research paper. Prereqs: UCCA 102 and UCCP 102, or permission of the instructor. Offered: Spring

**RELG 390 Monarchs, Bishops, and Martyrs: The English Reformation (4)**
Study of historical and religious factors of the English Reformation. Course is taught in London with visits to historical sites. Co-listed as HIST 390 and POLS 390. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Jan Term.

**RELG 433W Baptists: Their History and Theology (4)**
Survey of Baptist history from its beginnings in Europe and in colonial and revolutionary, with emphasis on the origin and development of the Southern Baptist Convention. Co-listed as HIST 433W. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor.

**RELG 441 Early Biblical Interpretation (4)**
Survey of major genres and methods of biblical interpretation in Second Temple Judaism and earliest Christianity, including the New Testament. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 491, 492, 493, 494 Independent Study in Religion (1, 2, 3, or 4)**
Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor.

**RELG 497 Special Topics in Religion (4)**
Unique, one-time courses offered either by visiting professors or as experimental courses by members of the department. Topics vary.

**RELG 498W Senior Seminar (4)**
Correlation of the various studies within the religion major, focusing on a senior assessment paper or subject. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

**RELG 499 Senior Seminar in Congregational Ministry (4)**
Study of congregational ministry through supervised experience in church congregational or church-related settings. Prereqs: UCBP 101, UCCA 102, and UCCP 102, or permission of the instructor. Offered: Spring.

# Sociology

## Faculty

H. Hugh Floyd, Chair, Professor
Robin W. Roberts, Associate Professor
Theresa C. Davidson, Assistant Professor

## Undergraduate Programs and Requirements

**Major**
Sociology

**Minor**
Sociology

The Department of Sociology offers a major in sociology leading to a bachelor of arts degree. A major in sociology can prepare students for graduate work in sociology or other post baccalaureate training such as social work, law, public health, international relations, labor relations, gerontology, or family counseling. In addition, students can work in a variety of areas including law enforcement, social services or local, state, and federal government agencies. The degree offers a foundation in understanding the relationships among persons in groups, as well as relations between groups.

All sociology majors must complete at least one research paper from each of the two major research methodologies in the field: one qualitative field study and one quantitative study based on computer analysis. This requirement can be fulfilled in any of the 300- or 400-level courses as part of the course requirements.

The department also offers a minor in sociology.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses. Sociology majors cannot use SOCI 100 (Introduction to Sociology) to meet the general education social science requirement.

### Sociology Major

| Sociology Major<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Sociology Major:** | | **48** |
| **Sociology Core:** | | **20** |
| SOCI 100 Introduction to Sociology | 4 | |
| SOCI 320W Research Methods in Sociology | 4 | |
| SOCI 407 Sociology Internship | 4 | |
| SOCI 410W Sociological Theory | 4 | |
| SOCI 430W Senior Seminar | 4 | |
| **Sociology Electives** | | **24** |
| **Mathematics** | | **4** |
| MATH 210 Elementary Statistics | 4 | |
| **General Electives** | | **16-28** |
| **Total Required Credits** | | **128** |

### Sociology Minor

| Sociology Minor<br>Required Courses | Total Required Credits |
|---|---|
| **Sociology Electives** | **8** |
| **Sociology Electives-Upper Level**<br>(select from 300- or 400-level courses) | **12** |
| **Total Required Credits** | **20** |

## Courses

**SOCI 100 Introduction to Sociology (4)**
Introduction to the way sociologists view society. Questions explored include: Why is society organized the way it is? How and why do different societies establish different patterns of organization? How does society influence individuals? How and why does society change or remain the same over time? What factors in society influence occurrences such as social conflict, violence, crime, sexual deviance, social inequity, gender relations, religious practices, etc.?

**SOCI 101 Introduction to Cultural Anthropology (4)**
Examination of theories and problems in social and cultural anthropology. Discussion of the historical development of cultural anthropology, methods of inquiry, focal problems, and contemporary theoretical perspectives focusing upon an introduction to worldwide cultural diversity. Offered: Jan Term.

**SOCI 201 Sociology of Family (4)**
Study of how sociological theory applies to the many types of families that exist in society. Critical questions include: What are the constraints of society on the family? What purpose does the family serve in the larger society? What roles do people play in the family? Who and what determines the assignment of those roles? What part does intimacy and sexuality play in family life? How do persons become involved in conflict and violence in families?

**SOCI 203 Contemporary Social Problems (4)**
Study of today's most pressing problems from the sociological perspective. Topics covered include alcohol and drug abuse, access and availability to health care, homicide, poverty, racism, rape, sexism, and sexual deviance, with a goal to understanding how personal limitations and expectations can sometimes cloud our perceptions and beliefs about these problems.

**SOCI 205 Sociology of Race and Ethnic Relations (4)**
Exploration of historic social forces that shaped specific definitions, rivalries, prejudices and outcomes of race and ethnicity in North America. Examples of other racial and ethnic stratification provide critical/analytic comparisons with North America. Examination of the future of race and ethnicity through analysis of the socially constructed pathways that led to contemporary society.

**SOCI 310 Archaeology (4)**
Investigation of world archaeology from the framework of major prehistoric cultural innovations. Discussion of the history of archaeology, theory, and methods of modern-day archaeologists and the significance of archaeological research to modern-day problems. Prereq: SOCI 100, or permission of the instructor. Offered: Summer.

**SOCI 320W Social Research Methods (4)**
Review of methodologies and skills used by sociologists. Introduction to the logic of scientific inquiry, and the relationship between development of theoretically-based research questions and the process for seeking answers. Focus on two methodologies: 1) qualitative field investigation techniques, such as participant observation and narrative/content analysis; and 2) quantitative techniques such as survey procedures. Introduction to the Statistical Package for the Social Sciences (SPSS-PC), a software program for statistical analysis. Sociology majors should take this course as early in their academic program as possible. Prereq: SOCI 100 or permission of department chair.

**SOCI 324 Human Sexuality (4)**
Examination of biological, spiritual, psychosocial, and cultural dimensions associated with sexuality. Discussion of beliefs and values that influence individual health and well-being, especially how these relate to the sexual aspect of what makes us human. Students gain insight into their own sexual natures and learn how to live responsibly in a society that often promotes the idea of sex rather than sexuality. Co-listed as PSYC 324. Prereq: SOCI 100 or permission of department chair.

**SOCI 331 Sociology of Aging (4)**
Study of the social, psychological, and biological changes that occur with aging, and how these changes affect interactions between older people and their family, friends, home, community, and society. This multidisciplinary approach, known as gerontology, addresses such issues as demography of aging, social theories of aging, social consequences of biological and psychological changes, social supports, living arrangements, economic status, populations at risk, and social policies. Course includes opportunities to discuss these issues with professionals who provide services for older people. Prereq: SOCI 100 or permission of department chair.

**SOCI 333 Sociology of Religion (4)**
Exploration of the social context of religion, including an introduction to theories and methods used in the sociological investigation of religion. Questions include: How does religion impact our sense of meaning and belonging in society? What social processes relate to the formation and evolution of churches, sects, and cults? How are religious institutions in American society undergoing change? Do gender, race and social class influence religious order and behavior? What is the relationship between state and church in American society? Co-listed as RELG 333. Prereq: SOCI 100 or permission of department chair.

**SOCI 335 Sociology of Work (4)**
Examination of a range of perspectives on the ways work has been structured and managed in human history. Concepts covered include how and why some individuals acquire more power than others within the workplace; the changing structure of the labor market; and the impact of work on other areas of life and on social issues. Prereq: SOCI 100 or permission of department chair.

**SOCI 337 Sociology of Medicine (4)**
Exploration of how society and culture influence perceptions that certain conditions/behaviors are indicators of health or illness. Questions include: Where do people seek help and how is it delivered/received? How widespread is illness and disease in society? Do factors such as gender, race, etc., impact which people get sick and what happens to them? What purpose does health care serve for the society at large? How does the United States health care system compare to those found in other societies? Prereq: SOCI 100 or permission of department chair.

**SOCI 339 Sociology of Mental Disorder (4)**
Study of the relationship between mental disorder and society. Issues addressed include the impact of the sociocultural context on the definition of mental disorder, and the distribution of mental disorder among persons based on gender, age, race, social class, and rural or urban residence. Analysis of effects of different forms of social organization and policy on the experiences of those identified as mentally disordered. Examination of the consequences of law and treatment services on social regulation for the mentally disordered. Prereq: SOCI 100 or permission of department chair.

**SOCI 343 Criminology (4)**
Introduction to the various theoretical approaches that guide the study of crime and its implications. Examination of problems related to the definition of crime, the extent or distribution of crime in society, as well as the impact of criminal activity on society. Review of the criminal justice system, the social processes that occur within it and the outcomes of this system for individuals and the community. Prereq: SOCI 100 or permission of department chair.

**SOCI 345 Juvenile Delinquency (4)**
Examination of juvenile delinquency using the sociological perspective. Critical questions include: What is juvenile delinquency? What is the distribution of juvenile delinquency in society? In which groups are youth more likely to be delinquent? Are there particular characteristics of society which influence patterns of juvenile delinquency? What research methods are used to study delinquency? How is society responding with regard to prevention and treatment of delinquency among youth? Prereq: SOCI 100 or permission of department chair.

**SOCI 347 Independent Study (2 or 4)**
Independent studies course that must comply with the following procedures: 1) Student is responsible for identifying an appropriate topic for investigation. 2) Student must determine if a faculty member can or will be able to undertake the project. This must be done at least one semester prior to the semester during which the work is to be completed. 3) Criteria for fulfilling the requirements for credit must be established between the student and the directing faculty member. 4) Agreement must be on file with the faculty member and the department. Students taking this course must have junior standing and have completed at least eight credits of sociology. Prereq: SOCI 100 or permission of department chair.

**SOCI 349 Sociology of Children (4)**
Exploration of the social construction of childhood over time and space, presenting a view of childhood distinct from popular notions. Concepts covered include social forces involved in shaping childhood in North America; how society has changed its definition of childhood over the years; how children negotiate their social roles with each other and with adults; and how children create their own culture distinct from adult culture. Social problems that children experience are focal points for research in the course. Prereq: SOCI 100.

**SOCI 360 Urban Geography (4)**
Geographic perspective of the past, present, and future of the American city. Topics include the historic roots of cities, development of the U.S. urban system, transportation, and the shaping of cities; social, political, and economic dynamics of urban areas; urban growth, decline, and revitalization; suburbanization; and challenges facing cities in the twenty-first century. Co-listed as GEOG 360 and POLS 360. Offered: Spring, on rotation.

**SOCI 401 Social Psychology (4)**
Introduction to social psychology from a sociological perspective, examining the relationship between the person and society. Questions include: What impact does society have on the formation of identity and the view we have of ourselves? How do we, as a society, create a perspective of the world around us and use this perspective to regulate each other? What processes regulate the way we establish organizations such as family or work groups and interact within these social groups? Prereq: SOCI 100 or permission of department chair.

**SOCI 403 Social Class and Inequality (4)**
Examination of the various ways societies have organized the production and distribution of resources, and the results for social inequality. Concepts covered include the different ways we currently structure, define, and produce class in American society; assessment of the importance of socioeconomic class in society, and its consequences for social cohesion and optimal social functioning; and assessment of how class inequality interacts with other socially stratified systems such as race/ethnicity and sex/gender. Prereq: SOCI 100 or permission of department chair.

**SOCI 405 Sociology of Deviance (4)**
Examination of deviance using the major sociological theories, focusing on the incidence and distribution of deviance in society and explaining it from a sociological point of view. Prereq: SOCI 100 or permission of department chair.

**SOCI 407 Sociology Internship (4)**
Internship in which students can receive credit for community-based experience in agencies or organizations that deal with issues such as juvenile services, probation, literacy, the elderly, children's health care, etc. Through contact with department faculty and preparation of a written assessment, students develop and utilize a sociologically-based understanding of their experience. Prereq: Junior standing and 12 credits of sociology coursework.

**SOCI 409 Special Topics in Sociology (2 or 4)**
Classroom-based course in lecture and/or discussion format. Topics vary. See class schedule for topic. Prereq: SOCI 100 or permission of department chair.

**SOCI 410W Sociological Theory (4)**
Introduction to stories or theories developed by persons whom sociologists consider central to the understanding of how and why humans organize, behave and interact in certain ways. Building upon ideas and evidence from other sociological investigation, this course provides a more complete perspective of each theorist studied. Prereq: Senior standing.

**SOCI 427 Sociology and Environment (4)**
Socio-historical examination of the relationship between the social and the natural environments. Focus on the modern global environment with its challenges for risk management and with its tension between needs for development and sustainability of environmental resources. Disasters (technological and natural) will be compared as social products with sociological consequences. Finally, sociological outcomes will be evaluated using social-environmental justice issues related to class, race, and gender. Prereq: SOCI 100 or permission of department chair.

**SOCI 430W Senior Seminar (4)**
Capstone course in sociology. Students participate in reading and discussion of assignments from primary source materials in theory and/or develop and carry out a research project. Prereq: Senior standing and 20 credits of sociology coursework.

# World Languages and Cultures

## Faculty

Mikle D. Ledgerwood, Chair, Professor, French
Myralyn F. Allgood, Professor, Spanish
Terry H. Pickett, Professor and Program Director, German and Critical Languages
Millicent A. Bolden-Frazier, Associate Professor, Spanish
Kelly C. Jensen, Associate Professor, Spanish
Lynda J. Jentsch, Associate Professor and Program Director, Spanish
Mary E. McCullough, Associate Professor and Program Director, French
Linda W. Ables, Assistant Professor, Spanish, and Language Missions Coordinator
Charlotte L. Coleman, Assistant Professor, Spanish, and Director, General Education
Angela D. Ferguson, Assistant Professor, German
Heather A. West, Assistant Professor, French, and Academic Director of Laboratories
Charles E. Workman, Assistant Professor, Spanish, Technical Director of Laboratories
Carolyn R. Crocker, Instructor, Spanish, Administrative Director of Laboratories
María A. Whatley, Instructor, Spanish

## Undergraduate Programs and Requirements

### Majors
French
German
Spanish
World Language and Literature (Two Languages)

### Minors
French
German
Spanish
Latin American Studies
World Languages

### Interdisciplinary Concentrations
Language and World Trade with a specialty in French, German, Spanish or World Languages
Latin American Studies

### Teacher Certification: Middle School, Secondary, P-12*
French
German
Spanish

The Department of World Languages and Cultures (WLAC) offers single-language majors in French, German, or Spanish, and in two languages combined (French, German, and/or Spanish) through the world language and literature major. The department also offers interdisciplinary concentrations in Latin American studies and language and world trade. Students majoring in language and world trade may choose a concentration in French, German, Spanish, or another world language. All WLAC majors and interdisciplinary concentrations earn a bachelor of arts degree.

The department also offers minors in French, German, Spanish, and world languages and cultures (combination of languages), plus an interdisciplinary minor in Latin American studies.

Completion of the major or minor is determined by the number of credits in the language. In order to fulfill the minimum credits required, *additional credit hours must be completed* for any courses taken or transferred in for *fewer* than 4 credits.

*See the Teacher Education section for details on middle school, secondary, and P-12 teacher certification in French, German, and Spanish.

### Proficiency-Based Instruction

At all levels, language instruction at Samford is based on developing proficiency in the four skills of understanding, speaking, reading, and writing, studied within the geographical and cultural context of the target language. Instructional and assessment methodologies follow competency-based guidelines established by the American Council for the Teaching of Foreign Languages (ACTFL). The campus experience is enhanced by language and computer laboratories and complemented by numerous opportunities to study in one of the department's classrooms abroad.

### Placement

Student scores on the department's placement test determine the level of entry into general education-level language courses. Once a sequence (101-102, 201-202, or 203) is completed, students may not receive credit for taking a lower-level class in the same language. Successful completion of the previous course in a sequence serves as prerequisite to the next. Students may enter language studies at the 101, 102, 201, 203, or 300 levels. Students placing at the 300 level must take a minimum of one 4-credit language course at the 300 or 400 level to fulfill the general education world language requirement for most Arts and Sciences majors. Students whose primary language is a WLAC language must take 3-4 credits at the 300-400 level if they desire to use that language to fulfill their general education language requirement. Students whose primary language is not a WLAC language should consult with the WLAC chair.

### WLAC Majors

For students planning careers with international firms, service agencies, missions, teaching, or for those who seek the advantage of being bilingual in the multicultural world of the twenty-first century, the world languages and cultures (WLAC) major courses of study provide the opportunity to develop advanced linguistic proficiency and increase cross-cultural understanding. All WLAC graduating seniors, upon completion of exit interviews and writing sample analyses, receive internationally recognized oral and writing proficiency ratings from the department's ACTFL-trained examiners.

### Critical Languages

In association with the National Association of Self-Instructional Language Programs, the WLAC department offers self-instructional/tutorial language study in Arabic, Chinese, Hindi, Italian, Japanese, Portuguese, Russian, Swahili, and Thai. Other nontraditional languages may also be available if there is sufficient demand.

### Mentored Courses

The department also offers a number of specialized, mentored courses and independent projects for 1, 2, 3, or 4 credits in French, German, Spanish, and critical languages (French, German, Spanish 310, 311, 321, 331, 340, 360, and 450; and 311, 321, 331, and 360 in any critical language). Students may take up to 8 credits in these courses. A maximum of 4 mentored credits at the 300- and 400-level of instruction may be applied to a major or minor.

### University Core Curriculum and General Education Requirements

See University Core Curriculum and General Education Requirements in the Howard College of Arts and Sciences introductory pages for a list of required and applicable courses.

### Required Minor for Language and Literature Majors

WLAC's language and literature majors are required to complete a minor, choosing one of the following options:

1. An established minor in a second world language.
2. An established minor (or second major) in another discipline
3. A specially designed world languages minor, consisting of six courses in a combination of other languages at any level, created in consultation with a WLAC faculty advisor.

## French, German, or Spanish Language and Literature Major (One Language)

The bachelor of arts in French, German, or Spanish language and literature prepares students for a variety of career and graduate school options. The program of study may be combined with essential education courses to earn teacher certification.

| French, German, or Spanish Language and Literature Major (One Language) Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Language & Literature Major (One Language):** | | **32** |
| **French, German, or Spanish** | | **32** |
| Elementary French, German, or Spanish 101 (or equivalent proficiency) | (4)* | |
| Elementary French, German, or Spanish 102 (or equivalent proficiency) | (4)* | |
| Intermediate French, German, or Spanish 201** and<br>Intermediate French, German, or Spanish 202**<br>*or*<br>Accelerated Intermediate French or Spanish 203** | (4)*<br>(4)*<br>*or*<br>(4)* | |
| French, German, or Spanish 300- and 400-level courses, including two literature courses at the 400-level and the Senior Project*** | 32 | |
| **Required Minor** | | **20** |
| **General Electives** | | **12-24** |
| **Total Required Credits** | | **128** |

*These credits are included in the General Education Requirements.
**Students who score high enough on placement criteria may register for these courses.
***Senior Project may be replaced by an eighth upper-level course by second majors only.

## World Language and Literature Major French, German, and/or Spanish (Two Languages)

| World Language and Literature Major French, German, and/or Spanish (Two Languages) Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Language & Literature Major (Two Languages):** | | **36** |
| **French, German, or Spanish** | | **36** |
| Elementary French, German, or Spanish 101 (or equivalent proficiency) | (8)* | |
| Elementary French, German, or Spanish 102 (or equivalent proficiency) | (8)* | |
| Intermediate French, German, or Spanish 201** and<br>Intermediate French, German, or Spanish 202**<br>*or*<br>Accelerated Intermediate French or Spanish 203** | (8)*<br>(8)*<br>*or*<br>(8)* | |
| Eight French, German, or Spanish 300- and 400-level courses (four in each language), including one 400-level literature course in each language, plus one Senior Project that combines the two languages. | 36 | |
| **General Electives** | | **28-40** |
| **Total Required Credits** | | **128** |

*These credits (up to 16 for one language) are included in the General Education Requirements.
**Students who score high enough on placement criteria may register for these courses.

## Language and World Trade Interdisciplinary Concentration

The language and world trade interdisciplinary concentration, offered in cooperation with the School of Business, is a comprehensive combination of linguistic skills and essential business knowledge. It concludes with an international trade internship. Completion of this interdisciplinary concentration satisfies general education foreign language and social science requirements for the College of Arts and Sciences. Students majoring in language and world trade may choose a specialty in French, German, Spanish, or another world language offered by the WLAC department.

| Language and World Trade Interdisciplinary Concentration Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Language & World Trade Interdisciplinary Concentration:** | | **72-76** |
| **Language Courses** | | **40** |
| Intermediate French, German, or Spanish 201** and<br>Intermediate French, German, or Spanish 202**<br>*or*<br>Accelerated Intermediate French or Spanish 203** | (4)*<br>(4)*<br>*or*<br>(4)* | |
| Conversation/Composition Course | 4 | |
| Civilization and Culture Course | 4 | |
| Literature 400-level Courses | 8 | |
| Major Language Electives, 300- and 400-level | 8 | |
| French, German, Spanish 370W | 4 | |
| French, German, Spanish 470 | 4 | |
| One year of a second language | 8 | |
| **Business and Mathematics Courses** | | **29** |
| **Group I** (to be completed first) | **14** | |
| ACCT 211 Accounting Concepts I | 3 | |
| ACCT 212 Accounting Concepts II | 3 | |
| BUSA 160 Computer Competency Assessment | 1 | |
| ECON 201 Principles of Macroeconomics* | (4)* | |
| ECON 202 Principles of Microeconomics | 3 | |
| MATH 210 Elementary Statistics | 4 | |
| **Group II** (Prereq: Junior standing and completion of Group I) | **15** | |
| BUSA 252 Legal Environment of Business | 3 | |
| BUSA 303 Principles of Management | 3 | |
| BUSA 311 Marketing Management | 3 | |
| BUSA 321 Financial Management | 3 | |
| BUSA 484 International Management | 3 | |
| **Electives:** (Select from list below; other electives can be taken with advisor's permission.) | | **3-7** |
| COMS 215 Oral Communication (strongly recommended) | 4 | |
| GEOG 101 World Regional Geography | 4 | |
| GEOG/HIST/POLS 393 Europe: Land and People | 4 | |
| GEOG/HIST/POLS 395 Asia: Land and People | 4 | |
| HIST 461W Latin American History*** | 4 | |
| LAST 201 Introduction to Latin American Studies | 4 | |
| POLS 310W U.S. Foreign Relations | 4 | |
| POLS 319W International Relations | 4 | |
| POLS 322 Latin American Politics | 4 | |
| POLS 351W Major European Governments | 4 | |
| POLS 363W Politics of Developing Nations | 4 | |
| POLS 451W Geography of International Affairs | 4 | |
| **Total Required Credits** | | **128-136** |

*These credits are included in the General Education Requirements.
**Students who score high enough on placement criteria may register for these courses.
***Spanish majors only.

## Latin American Studies Interdisciplinary Concentration

The bachelor of arts in Latin American studies, a joint program with the departments of history, political science, and geography, is intended to teach students about the rich civilizations in the portions of North, Central, and South America and the Caribbean known as Latin America. Through emphasis on the Spanish language and an interdisciplinary approach to the region, students will obtain a nuanced and deep understanding of Latin America.

| Latin American Studies Interdisciplinary Concentration Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **University Core Curriculum** | | **22** |
| **General Education Requirements** | | **30-42** |
| **Latin American Studies Interdisciplinary Concentration:** | | **52** |
| **I. Language** | | **16** |
| PORT 101 Elementary Portuguese I | 4 | |
| PORT 102 Elementary Portuguese II | 4 | |
| SPAN 301W Conversation/Composition/Grammar | 4 | |
| SPAN 302W Conversation/Composition/Reading | 4 | |
| **II. Interdisciplinary Course** | | **4** |
| LAST 201 Introduction to Latin American Studies | 4 | |
| **III. Discipline-Based Courses:** | | **20** |
| **A. Social Science** (choose two) | | |
| Geography: GEOG/POLS 396 Latin America: Land/People | 4 | |
| History: HIST 461W Latin American History | 4 | |
| Political Science: POLS 322 Latin American Politics | 4 | |
| **B. Literature** (choose one) | | |
| SPAN 403W Spanish American Literature I | 4 | |
| SPAN 404W Spanish American Literature II | 4 | |
| SPAN 405W Special Topics* | 4 | |
| SPAN 406W Special Topics* | 4 | |
| **C. Civilization/Culture** (choose two) | | |
| LAST 380 Latin American Studies Seminar | 4 | |
| SPAN 316 Latin American Culture I | 4 | |
| SPAN 317 Latin American Culture II | 4 | |
| **IV. Study Abroad in Latin America** (select one of the following): | | **4** |
| BIOL 340 Amazon Rain Forest | 4 | |
| PORT 351 Language Study Abroad: Adv Port I | 4 | |
| PORT 352 Language Study Abroad: Adv Port II | 4 | |
| PORT 353 Language Study Abroad: Cultural Stdies I | 4 | |
| PORT 354 Language Study Abroad: Cultural Stdies II | 4 | |
| SPAN 351 Language Study Abroad: Adv Spanish I | 4 | |
| SPAN 352 Language Study Abroad: Adv Spanish II | 4 | |
| SPAN 353 Language Study Abroad: Cultural Stdies I | 4 | |
| SPAN 354 Language Study Abroad: Cultural Stdies II | 4 | |
| **V. Latin America in Global Perspective** (select one of the following): | | **4** |
| BIOL 326 Environmental Science | 4 | |
| ECON 397 International Studies in Economics* | 4 | |
| ESSM 312 Food, Culture, & Society* | 4 | |
| HIST/POLS 451 Geography of International Affairs | 4 | |
| PHYS 100 Physics for Society* | 4 | |
| PHYS 408 International Physics Experience* | 4 | |
| POLS 319W International Relations | 4 | |
| POLS 363W Politics of Developing Nations | 4 | |
| **VI. Capstone Experience**** | | **4** |
| **General Electives** (chosen with advisor's approval) | | **12-24** |
| **Total Required Credits** | | **128** |

*Courses must have a Latin American focus.
**Students must take a discipline-based senior seminar in an Arts and Sciences department. The research project must have Latin American-related content, as determined through agreement with the advisor and the seminar professor.

## WLAC Minors - French, German, Spanish, Latin American Studies, and World Languages

For students in any discipline who wish to advance their linguistic proficiency and cross-cultural communication skills beyond the required intermediate level, minors are offered in French, German, and Spanish, consisting of 20 credits beyond the 202* or 203* language course.

Students in other disciplines may also choose to pursue a specially designed world languages minor consisting of six courses in a combination of other world languages at any level, excluding courses taken to satisfy the general education requirement, and created in consultation with a WLAC faculty advisor.

### French, German, or Spanish Minor

| French, German, or Spanish Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **French, German, or Spanish** | | **20-36** |
| Intermediate French, German, or Spanish 201** and<br>Intermediate French, German, or Spanish 202**<br>*or*<br>Accelerated Intermediate French or Spanish 203** | (4)*<br>(4)*<br>*or*<br>(4)* | |
| 300/400-level courses (French, German, Spanish) | 20 | |
| **Total Required Credits** | | **20-36** |

*These credits are included in the General Education Requirements.
**Students who score high enough on placement criteria may register for these courses.

### World Languages and Cultures Minor

| World Languages and Cultures Minor<br>Required Courses | Course Credits | Total Required Credits |
|---|---|---|
| **World Languages** | | **24** |
| World language courses, any combination<br>(excluding the General Education requirement) | 24 | |
| **Total Required Credits** | | **24** |

### Latin American Studies Interdisciplinary Minor

| Latin American Studies Interdisciplinary Minor<br>Required Courses | | Course Credits | Total Required Credits |
|---|---|---|---|
| **Latin American Studies Core** | | | **12** |
| LAST 201 | Introduction to Latin American Studies | 4 | |
| SPAN 301W | Conversation/Composition/Grammar* | 4 | |
| SPAN 302W | Conversation/Composition/Reading* | 4 | |
| **Latin American Cultural Studies** (choose one) | | | **4** |
| LAST 380 | Latin American Studies Seminar | 4 | |
| SPAN 316 | Latin American Culture I* | 4 | |
| SPAN 317 | Latin American Culture II | 4 | |
| **Latin American Studies Electives** (choose two) | | | **8** |
| GEOG 396 | Latin America: Land and People | 4 | |
| HIST 461W | Latin American History | 4 | |
| POLS 322 | Latin American Politics | 4 | |
| **Total Required Credits** | | | **24** |

*Or the equivalent SPAN study abroad option in Latin America.

## Courses

### FRENCH

**FREN 101 and 102 Elementary French I and II (4 each course)**
Introduction to French language and culture, aimed at developing basic proficiency in understanding, speaking, reading, and writing French. Three class meetings and two audiovisual and computer laboratory sessions weekly provide students with novice-level proficiency in preparation for the intermediate-level sequence. Prereq for FREN 102: Successful completion of FREN 101, satisfactory score on placement exam, or permission of program director. Offered: Fall (101); Spring (102)

**FREN 201 and 202 Intermediate French I and II (4 each course)**
Systematic review of French with continued emphasis on enhancing proficiency in understanding, speaking, reading, writing, and cultural understanding. Sequence includes two class meetings and two audiovisual and computer laboratory sessions weekly to provide a setting for intermediate-level mastery. Completion of this sequence fulfills the general education language requirement. Prereq for FREN 201: Successful completion of FREN 102 or satisfactory score on placement exam. Prereq for FREN 202: Successful completion of FREN 201. Offered: Fall (201), Spring (202), Summer 1 (both, locally), and Summer 2 (both, abroad).

**FREN 203 Accelerated Intermediate French (4)**
Accelerated intermediate course that compresses essential elements of FREN 201 and FREN 202 into one semester. Designed to develop cross-cultural understanding and proficiency in speaking, reading, writing, and understanding, it includes three class meetings and two laboratory sessions each week. Successful completion of this sequence fulfills the general education language requirement. Prereq: Grade of A in FREN 102 or the required score on the placement exam. Offered: Fall.

**FREN 301W Conversation/Composition/Grammar (4)**
Intensive practice of oral and written language skills and comprehensive review of advanced-level grammatical structures. Includes free and multi-draft composition and stresses effective self-expression. Prereq: Successful completion of FREN 202, 203, or the equivalent. Offered: Fall.

**FREN 302W Conversation/Composition/Reading (4)**
Intensive practice of oral and written language skills and development of advanced-level reading proficiency. Includes free and multi-draft composition and stresses French cultural and literary traditions. Prereq: Successful completion of FREN 202, 203, or the equivalent. Offered: Spring.

**FREN 310 Advanced Proficiency Enhancement (1)**
Mentored review and reinforcement of listening, speaking, reading, and/or writing skills, grammar structures, or career-oriented language context, as determined by individual student needs in French at the advanced level. Prereqs: Successful completion of FREN 301W or 302W, and permission of program director. Offered: Upon request.

**FREN 311, 321, and 331 Directed-Teaching Experience I, II, and III (1 each course)**
Guided practicum in language teaching to develop the individual's linguistic, instructional, and leadership skills. Prereqs: FREN 202, 203, or the equivalent; and permission of program director.

**FREN 315 and 316 French Culture I and II (4 each course)**
Overview of French-speaking societies from an historical and contemporary perspective with emphasis on their customs, values, geography, artistic achievements, and scientific discoveries. Prereq: FREN 202, 203, or the equivalent. Offered: On rotation.

**FREN 340 Advanced Career Studies (1-4)**
Mentored course in career-specific language acquisition at the advanced level. Course may be repeated if topics are different. Variable credit. Prereqs: Successful completion of at least one 4-credit upper-level course, or the equivalent, and permission of program director. Offered: Upon request.

**FREN 345 Language-Across-the-Curriculum (1)**
Mentored experience in the reading of content-specific texts. Course may be repeated for credit with different host classes. Prereqs: Successful completion of at least one 4-credit upper-level French course or the equivalent, concurrent enrollment in an approved host class in another discipline, and permission of program director. Offered: Upon request.

**FREN 351 and 352 Language Study Abroad: Advanced French I and II (4 each course)**
Intensive practice of audio-lingual skills and advanced grammatical structures in a French-speaking setting abroad. Stresses practical communication and effective self-expression in French.

**FREN 353 and 354 Language Study Abroad: Cultural Studies I and II (4 each course)**
Study of French culture and overview of contemporary society in a French-speaking setting abroad.

**FREN 360 French-for-Missions Internship (1-4 each term of service)**
Missions fieldwork in a French-speaking country under the direction of a Samford mentor and on-site mission personnel. Open to all students with intermediate-mid language proficiency or higher. May also count as an upper-level major elective. Prereqs: Permission of French program director and WLAC language missions coordinator. Offered: Upon request.

**FREN 370W French for Business (4)**
Study of intercultural communication and advanced French language proficiency as needed for business contexts. Stresses commercial vocabulary, correspondence, and documentation appropriate to a variety of professional settings. Open to any student with advanced proficiency, this very practical course may count as an upper-level elective. Required for language and world trade concentration. Offered: Fall or Spring, as needed.

**FREN 375 Advanced Grammar and Syntax (4)**
In-depth study of grammar and syntactical structures aimed at improving student language skills. Utilizes a variety of methodologies including, but not limited to, composition, translation, and stylistic analysis. Prereq: Successful completion of one four-credit, 300-level course or permission of the program director. Offered: On rotation.

**FREN 401W and 402W French Literature I and II (4 each course)**
Survey of the principal figures and literary movements of France from its beginnings to the present day. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in French. Prereqs: Successful completion of at least two 4-credit, 300-level courses, preferably FREN 302W; and FREN 315, 316, or the equivalent. Offered: On rotation.

**FREN 405W and 406W Special Topics in Literature I and II (4 each course)**
Study of selected French authors, literary movements, themes, or genres. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in French. Course(s) may be repeated for credit if topics are different. Prereqs: Successful completion of at least two 4-credit, 300-level courses, preferably FREN 302W; and FREN 315, 316, or the equivalent. Offered: On rotation.

**FREN 424 Senior Capstone: Second Language Teaching Methodology (4)**
Study of fundamental strategies that form the infrastructure of the teaching process for certification at all levels of second-language acquisition methodology, P-12 or 7-12. Emphasis on materials and methods appropriate to the designated levels of learning while promoting awareness of the multiple facets of language learning. Capstone course for seniors seeking teacher certification that also includes preparation for exit oral and writing proficiency exams. Offered: Fall or Spring, as needed.

**FREN 442W Senior Capstone: Research and Writing (4)**
Research and writing course designed to synthesize skills acquired and knowledge gained in previous coursework. Under a mentor's guidance, students develop a thesis, propose a solution to a problem, or produce and perform a creative work. Capstone course for language and literature majors that also includes literary readings and preparation for exit oral and writing proficiency exams. Required of all first majors. Prereqs: Senior standing, successful completion of at least one 400-level literature course, and permission of program director. Offered: Fall or Spring, as needed.

**FREN 450 Special Studies (1-4)**
Mentored, independent study in language, culture, or literature. Variable credit. Prereqs: At least one 4-credit upper-level course or the equivalent, and permission of program director and instructor. Offered: As needed.

**FREN 470 Senior Capstone: International Trade Internship (4)**
Directed student internship in an international business setting in the U.S. or abroad, mentored by Samford faculty and supervised by on-site agency personnel. Language and world trade seniors complete 160 hours of on-site work, maintain journals in the target language, and prepare for exit oral and writing proficiency exams. Prereqs: Senior standing, successful completion of course FREN 370W, and permission of program director. Offered: As needed.

## GERMAN

**GER 101 and 102 Elementary German I and II (4 each course)**
Introduction to German language and culture, aimed at developing basic proficiency in understanding, speaking, reading, and writing German. Three class meetings and two audiovisual and computer laboratory sessions weekly provide students with novice-level proficiency in preparation for the intermediate-level sequence. Prereq for GER 102: Successful completion of German 101, satisfactory score on placement exam, or permission of program director. Offered: Fall (101); Spring (102).

**GER 201 and 202 Intermediate German I and II (4 each course)**
Systematic review of German with continued emphasis on enhancing proficiency in understanding, speaking, reading, writing, and cultural understanding. Sequence includes two class meetings and two audiovisual and computer laboratory sessions weekly to provide a setting for intermediate-level mastery. Completion of this sequence fulfills the general education language requirement. Prereq for GER 201: Successful completion of GER 102 or satisfactory score on placement exam. Prereq for GER 202: Successful completion of GER 201. Offered: Fall (201), Spring (202), Summer (both, abroad).

**GER 301W Conversation/Composition/Grammar (4)**
Intensive practice of oral and written language skills and comprehensive review of advanced-level grammatical structures. Includes free and multi-draft composition and stresses effective self-expression. Prereq: Successful completion of GER 202 or the equivalent. Offered: Fall, on rotation.

**GER 302W Conversation/Composition/Reading (4)**
Intensive practice of oral and written language skills and development of advanced-level reading proficiency. Includes free and multi-draft composition and stresses German cultural and literary traditions. Prereq: Successful completion of GER 202 or the equivalent. Offered: Fall, on rotation.

**GER 310 Advanced Proficiency Enhancement (1)**
Mentored review and reinforcement of listening, speaking, reading, and/or writing skills, grammar structures, or career-oriented language context, as determined by individual student needs. Prereqs: Successful completion of GER 301W, 302W, or equivalent prior experience; and permission of program director. Offered: Upon request.

**GER 311, 321, and 331 Directed-Teaching Experience I, II, and III (1 each course)**
Guided practicum in language teaching to develop the individual's linguistic, instructional, and leadership skills. Prereqs: GER 202 or the equivalent, and permission of program director.

**GER 315 German Culture (4)**
Overview of German-speaking societies from an historical and contemporary perspective with emphasis on the customs, values, geography, and scientific discoveries of German-speaking countries. Prereq: GER 202 or the equivalent. Offered: Spring, on rotation.

**GER 340 Advanced Career Studies (1- 4)**
Mentored course in career-specific language acquisition at the advanced level. Course may be repeated if topics are different. Variable credit. Prereqs: Successful completion of at least one 4-credit upper-level course, or the equivalent, and permission of program director. Offered: Upon request.

**GER 345 Language-Across-the-Curriculum (1)**
Mentored experience in the reading of content-specific texts. Course may be repeated for credit with different host classes. Prereqs: Successful completion of at least one 4-credit upper-level German course or the equivalent, concurrent enrollment in an approved host class in another discipline, and permission of program director. Offered: Upon request.

**GER 351 and 352 Language Study Abroad: Advanced German I and II (4 each course)**
Intensive practice of audio-lingual skills and advanced grammatical structures in a German-speaking setting abroad. Stresses practical communication and effective self-expression in German.

**GER 353 and 354 Language Study Abroad: Cultural Studies I and II (4 each course)**
Study of German culture and overview of contemporary society in a German-speaking setting abroad.

**GER 360 German-for-Missions Internship (1-4 each term of service)**
Missions fieldwork in a German-speaking country under the direction of a Samford faculty and on-site mission personnel. Open to all students with intermediate-mid language proficiency or higher. May also count as an upper-level major elective. Prereqs: Permission of German program director and WLAC language missions coordinator. Offered: Upon request.

**GER 370W German for Business (4)**
Study of intercultural communication and advanced German language proficiency as needed for business contexts. Stresses commercial vocabulary, correspondence, and documentation appropriate to a variety of professional settings. Open to any student with advanced proficiency, this very practical course may count as an upper-level elective. Required for language and world trade concentration. Offered: Spring, on rotation.

**GER 375 Advanced Grammar and Syntax (4)**
In-depth study of grammar and syntactical structures aimed at improving student language skills. Utilizes a variety of methodologies including, but not limited to, composition, translation, and stylistic analysis. Prereq: Successful completion of one four-credit, 300-level course or permission of the program director. Offered: On rotation.

**GER 401W and 402W German Literature I and II (4 each course)**
Survey of the principal figures and literary movements of Germany from its beginnings to the present day. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in German. Prereq: Successful completion of at least two 4-credit, 300-level courses, preferably GER 302W and GER 315, or the equivalent, or permission of program director. Offered: On rotation.

**GER 405W and 406W Special Topics in Literature I and II (4 each course)**
Study of selected German authors, literary movements, themes, or genres. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in German. Course(s) may be repeated for credit if topics are different. Prereq: Successful completion of at least two 4-credit, 300-level courses, preferably GER 302W and GER 315, or the equivalent, or permission of program director. Offered: On rotation.

**GER 424 Senior Capstone: Second Language Teaching Methodology (4)**
Study of fundamental strategies that form the infrastructure of the teaching process for certification at all levels of second-language acquisition methodology, P-12 or 7-12. Emphasis on materials and methods appropriate to the designated levels of learning while promoting awareness of the multiple facets of language learning. Capstone course for seniors seeking teacher certification that also includes preparation for exit oral and writing proficiency exams. Offered: Fall or Spring, as needed.

**GER 442W Senior Capstone: Research and Writing (4)**
Research and writing course designed to synthesize skills acquired and knowledge gained in previous coursework. Under a mentor's guidance, students develop a thesis, propose a solution to a problem, or produce and perform a creative work. Capstone course for language and literature majors that also includes literary readings and preparation for exit oral and writing proficiency exams. Course required of all first majors. Prereqs: Senior standing, successful completion of at least one 400-level literature course, and permission of program director. Offered: Fall or Spring, as needed.

**GER 450 Special Studies (1-4)**
Mentored, independent study in language, culture, or literature. Variable credit. Prereq: At least one 4-credit upper-level course or the equivalent, and permission of program director and the instructor. Offered: As needed.

**GER 470 Senior Capstone: International Trade Internship (4)**
Directed student internship in an international business setting in the U.S. or abroad, mentored by Samford faculty and supervised by on-site agency personnel. Language and world trade seniors complete 160 hours of on-site work, maintain journals in the target language, and prepare for exit oral and writing proficiency exams. Prereqs: Senior standing, successful completion of GER 370W, and permission of program director. Offered: As needed.

## GREEK and HEBREW

See Department of Classics and the Biblical Languages course listing in the Department of Religion, respectively.

## LATIN

See course listing in the Department of Classics.

## LATIN AMERICAN STUDIES

**LAST 201 Introduction to Latin American Studies (4)**
Interdisciplinary introduction to the literature, drama, religion, philosophy, and fine arts of Latin America. Taught in English. Successful completion fulfills the general education humanities requirement.

**LAST 380 Latin American Studies Seminar (4)**
Exploration of special topics on Latin American culture and civilization, using an interdisciplinary approach. This course may also be taken as PORT 380 or SPAN 380 and may be cross-listed as a special topics course in disciplines related to Latin American studies. Taught in English. Prereq: SPAN or PORT 202; SPAN 203 or the equivalent; and permission of program director. Offered: On rotation.

## SPANISH

**SPAN 101 and 102 Elementary Spanish I and II (4 each course)**
Introduction to Spanish language and culture, aimed at developing basic proficiency in understanding, speaking, reading, and writing Spanish. Three class meetings and two audiovisual and computer laboratory sessions weekly provide students with novice-level proficiency in preparation for the intermediate-level sequence. Prereq for SPAN 102: Successful completion of SPAN 101, satisfactory score on placement exam, or permission of program director. Offered: Fall and Jan Term (101), Spring (102), and Summer (both, locally and abroad).

**SPAN 201 and 202 Intermediate Spanish I and II (4 each course)**
Continued emphasis on enhancing proficiency in understanding, speaking, reading, writing, and cultural understanding. Sequence includes two class meetings and two audio/visual and computer laboratory sessions weekly to provide a setting for intermediate-level mastery. Completion of this sequence fulfills the general education language requirement. Prereq for SPAN 201: Successful completion of SPAN 102 or satisfactory score on placement exam. Prereq for SPAN 202: Satisfactory completion of SPAN 201. Offered: Fall (201), Spring (202), Summer (both, locally and abroad).

**SPAN 203 Accelerated Intermediate Spanish (4)**
Accelerated, intermediate course that compresses essential elements of SPAN 201 and SPAN 202 into one semester. Designed to develop cross-cultural understanding and proficiency in speaking, reading, writing, and understanding, it includes three class meetings and two laboratory sessions each week. Successful completion of this sequence fulfills the general education language requirement. Prereq: Grade of A in SPAN 102, with recommendation from SPAN 102 instructor, or the required score on the placement exam. Offered: Fall and Spring.

**SPAN 301W Conversation/Composition/Grammar (4)**
Intensive practice of oral and written language skills and comprehensive review of advanced-level grammatical structures. Includes free and multi-draft composition and stresses effective self-expression. Prereq: Successful completion of SPAN 202, 203, or the equivalent.

**SPAN 302W Conversation/Composition/Reading (4)**
Intensive practice of oral and written language skills and development of advanced-level reading proficiency. Includes free and multi-draft composition and stresses Spanish cultural and literary traditions. Prereq: Successful completion of SPAN 202, 203, or the equivalent.

**SPAN 310 Advanced Proficiency Enhancement (1)**
Mentored review and reinforcement of listening, speaking, reading, and/or writing skills, grammar structures, or career-oriented language context, as determined by individual student needs. Prereqs: Successful completion of SPAN 301W, 302W, or equivalent prior experience, and permission of program director. Offered: Jan Term.

**SPAN 311, 321, and 331 Directed-Teaching Experience I, II, and III (1 each course)**
Guided practicum in language teaching to develop the individual's linguistic, instructional, and leadership skills. Prereqs: SPAN 202, 203, or the equivalent, and permission of program director.

**SPAN 315 Spanish Culture (4)**
Overview of the major historical, social, political, and cultural aspects of Spain's culture from its beginning to the present day. Spanish is actively used in presentations, interactive class discussion, and writing assignments. One civilization course is required of all majors. Prereq: SPAN 202, 203, or the equivalent. Offered: Spring.

**SPAN 316 Latin American Culture I (4)**
Overview of the major historical, social, political, and cultural aspects of Latin America's culture from its beginning to the twentieth century. Spanish is actively used in presentations, interactive class discussion, and writing assignments. One civilization course is required of all majors. Prereq: SPAN 202, 203, or the equivalent. Offered: Fall.

**SPAN 317 Latin American Culture II (4)**
Overview in Spanish of the major current cultural issues in Latin American society in the 20th and 21st centuries, as well as an in-depth study of Latinos living in the U.S. Spanish is used in presentations and interactive class discussion, as well as reading and writing assignments. Prereq: Successful completion of one four-credit 300-level Spanish course. Offered: Spring.

**SPAN 322 Spanish for Missions (2)**
Practical study of biblical terminology, methodology of missions, bible study, and discipleship materials for those interested in career missions or those who would like to share their faith in Christ with Spanish-speaking peoples. Prereq: Completion of at least one upper-level course or equivalent.

**SPAN 332 Medical Spanish (2)**
Practice of medical terminology and role-play situations in the classroom combined with supervised fieldwork at local health care facilities providing services for Hispanic patients. Prereqs: Completion of at least one upper-level course and permission of program director.

**SPAN 340 Advanced Career Studies (1-4)**
Mentored course in career-specific language acquisition at the advanced level. Course may be repeated if topics are different. Variable credit. Prereqs: Successful completion of at least one 4-credit upper-level course, or the equivalent, and permission of program director. Offered: Upon request.

**SPAN 345 Language-Across-the-Curriculum (1)**
Mentored course in the reading of content-specific texts. Course may be repeated for credit with different host classes. Prereqs: Successful completion of at least 4-credit one upper-level Spanish course, or the equivalent; concurrent enrollment in an approved host class in another discipline; and permission of program director. Offered: Upon request.

**SPAN 351 and 352 Language Study Abroad: Advanced Spanish I and II (4 each course)**
Intensive practice of audio-lingual skills and advanced grammatical structures in a Spanish-speaking setting abroad. Stresses practical communication and effective self-expression in Spanish.

**SPAN 353 and 354 Language Study Abroad: Cultural Studies I and II (4 each course)**
Study of Hispanic culture and overview of contemporary society in a Spanish-speaking setting abroad. One civilization course is required of all majors.

**SPAN 360 Spanish-for-Missions Internship (1-4 each term of service)**
Missions fieldwork in a Spanish-speaking country under the direction of a Samford mentor and on-site mission personnel. Open to all students with intermediate-mid language proficiency or higher. May also count as an upper-level major elective. Prereq: Permission of Spanish program director and the WLAC language missions coordinator. Offered: Upon request.

**SPAN 370W Spanish for Business (4)**
Study of intercultural communication and advanced Spanish language proficiency as needed for business contexts. Stresses commercial vocabulary, correspondence, and documentation appropriate to a variety of professional settings. Open to any student with advanced proficiency, this very practical course may count as an upper-level elective. Required for language and world trade concentration. Offered: Spring.

**SPAN 375 Advanced Grammar and Syntax (4)**
In-depth study of grammar and syntactical structures aimed at improving student language skills. Utilizes a variety of methodologies including, but not limited to, composition, translation, and stylistic analysis. Required for all majors. Prereq: Successful completion of SPAN 302W. Offered: Fall.

**SPAN 401W and 402W Spanish Literature I and II (4 each course)**
Survey of the principal figures and literary movements of Spain from its beginnings to the present day. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in Spanish. Prereqs: Successful completion of SPAN 302W; and SPAN 315, 316, or the equivalent. Offered: On rotation.

**SPAN 403W and 404W Spanish American Literature I and II (4 each course)**
Survey of the principal figures and literary movements of Spanish America from its beginnings to the present day. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in Spanish. Prereqs: Successful completion of SPAN 302W; and SPAN 315, 316, or the equivalent. Offered: Fall (403W); Spring (404W).

**SPAN 405W and 406W Special Topics in Literature I and II (4 each course)**
Study of selected Hispanic authors, literary movements, themes, or genres. Stresses reading of primary works, critical analysis, library research, multi-draft composition, and continued development of advanced oral and written language proficiency within a literary context. Interactive class conducted in Spanish. Course(s) may be repeated for credit if topics are different. Prereqs: Successful completion of SPAN 302W; and SPAN 315, 316, or the equivalent. Offered: On rotation.

**SPAN 424 Senior Capstone: Second Language Teaching Methodology (4)**
Study of fundamental strategies that form the infrastructure of the teaching process for certification at all levels of second-language acquisition methodology, P-12 or 7-12. Emphasis on materials and methods appropriate to the designated levels of learning while promoting an awareness of the multiple facets of language learning. Capstone course for seniors seeking teaching certification that also includes preparation for exit oral and writing proficiency exams. Offered: Fall or Spring, as needed.

**SPAN 442W Senior Capstone: Research and Writing (4)**
Research and writing course designed to synthesize skills acquired and knowledge gained in previous coursework. Students develop a thesis, propose a solution to a problem, or produce and perform a creative work. Capstone course for language and literature majors that also includes literary readings and preparation for exit oral and writing proficiency exams. Required of all first majors. Prereqs: Senior standing, successful completion of SPAN 375 and at least one 400-level literature course, and permission of program director. Offered: Spring.

**SPAN 450 Special Studies (1-4)**
Mentored independent study in language, culture, or literature. Variable credit. Prereqs: At least one 4-credit upper-level course, or the equivalent, and permission of program director and instructor. Offered: As needed.

**SPAN 470 Senior Capstone: International Trade Internship (4)**
Directed student internship in an international business setting in the U.S. or abroad, mentored by Samford faculty and supervised by on-site agency personnel. Language and world trade seniors complete 160 hours of on-site work, maintain journals in the target language, and prepare for exit oral and writing proficiency exams. Prereqs: Senior standing, successful completion of SPAN 370W, and permission of program director. Offered: As needed.

## CRITICAL LANGUAGES PROGRAM

The Critical Languages Program (CLP) is a language instructional method that makes possible the offering of less-commonly taught, but highly relevant languages. The curriculum is student-centered and oriented principally toward the initial acquisition of oral skills, proceeding ultimately into the written form of the language.

Students in CLP courses work intensively with specially prepared texts and tapes, and meet in small group drill sessions twice a week with a native-speaking tutor. They continue their language practice in two additional sessions each week in WLAC's audiovisual and computer laboratories. Exams are given on an individual basis with external examiners. These examiners are professors of their respective languages at other institutions who come to campus to examine Samford CLP students at the end of each semester.

CLP courses follow the traditional semester calendar and meet Tuesdays and Thursdays. They are available to both daytime and evening (Metro) students. Courses are sequential, with successful completion of the previous course serving as prerequisite to the next. Courses numbered 101 and 201 are offered during fall semesters only; courses numbered 102 and 202 are offered during spring semesters only. A WLAC minor (see description, p. 99) is offered in any of the CLP languages, but content-based coursework beyond the 200 level can only be completed abroad in courses preapproved by the CLP director.

Critical languages offered at Samford are: Arabic, Chinese, Hindi, Italian, Japanese, Portuguese, Russian, Swahili, and Thai. Course sequences are as follows:

**ARAB/CHIN/HIND/ITAL/JAPN/PORT/RUSS/SWAH/THAI 101 and 102 Elementary I and II (4 each course)**
Introduction to understanding, speaking, reading, and writing the target language. Self-instructional (text and tape), with two intensive tutorial drills and two laboratory sessions per week. Offered: Fall (101); Spring (102).

**ARAB/CHIN/HIND/ITAL/JAPN/PORT/RUSS/SWAH/THAI 201 and 202 Intermediate I and II (4 each course)**
Continued study in understanding, speaking, reading, and writing the target language. Self-instructional (text and tape), with two intensive tutorial drills and two laboratory sessions per week. Offered: Fall (201); Spring (202).

**ARAB/CHIN/HIND/ITAL/JAPN/PORT/RUSS/SWAH/THAI 311, 321, and 331 Directed Teaching Experience I, II, and III (1 each course)**
Guided practicum in language teaching to develop the individual's linguistic, instructional, and leadership skills. Prereqs: Successful completion of 202 level in the target language, or the equivalent, and permission of program director.

**ARAB/CHIN/HIND/ITAL/JAPN/PORT/RUSS/SWAH/THAI 351 and 352 Language Study Abroad: Advanced I and II (4 each course)**
Intensive practice of audio-lingual skills and advanced grammatical structures in a setting abroad where the target language is spoken. Stresses practical communication and effective self expression in the target language.

**ARAB/CHIN/HIND/ITAL/JAPN/PORT/RUSS/SWAH/THAI 353 and 354 Language Study Abroad: Cultural Studies I and II (4 each course)**
Study of civilization and culture and overview of contemporary society in a target-culture setting abroad.

**ARAB/CHIN/HIND/ITAL/JAPN/PORT/RUSS/SWAH/THAI 360 Language for Missions Internship (1-4 each term of service)**
Missions fieldwork in a country where the target language is spoken, under the direction of a Samford mentor and on-site mission personnel. Open to all students with intermediate language proficiency or higher in the target language. Prereq: Permission of the program director and the WLAC language missions coordinator. Offered: As needed.