

Women's and Gender Studies

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Faculty from other disciplines also support this program.

Women's and gender studies is by definition an interdisciplinary field. Gender is studied as a social construction that needs to be examined in conjunction with race and class. The field recognizes that culture and history shape and inform gender roles and experiences. Some of the basic questions considered are: What roles have women played in the sciences, the arts, politics, religion, and other fields? What issues have women and men faced because of their gender? How have these issues affected their lives, their words, their study, their status, and diverse societies in their cross-cultural relations? The goal of women's and gender studies is to explore these questions from a variety of perspectives.

The two elective courses must be outside the discipline of sociology and anthropology and must be selected from two different disciplines.

Minor in Women's and Gender Studies

A minor in Women's and Gender Studies requires six courses:

Code	Title	Semester Hours
Two of the following:		6.0
SOAN/WOM 170	Gender Paradigms	
SOAN/WOM 335	Gender & Masculinity	
SOAN/WOM 365	Global Perspectives of Women	
SOAN/WOM 360	Gender Theories	3.0
WOM 410	Senior Seminar	3.0
Two electives from the following: ¹		6.0
ENGL 253	Gender Studies in Literature	
PHIL 222	Feminist Philosophy	
POLS 240	Women in Politics	
WLIT 179	Reading French Society in Film	
Total Semester Hours		18.0

¹ The two elective courses must be outside the discipline of sociology and anthropology and must be selected from two different disciplines.

Off-Campus Programs

Principia offers several types of off-campus programs:

- Principia study abroad and domestic field programs (contact: Principia Study Abroad)
- Academic internships (contact: Internships and Career Development Office)
- Independent Course contracts when off campus, or during interterm (contact: Registrar's Office)

Study abroad programs, directed by a Principia full-time, continuing, faculty member, are interdisciplinary, experiential learning programs in a country other than the United States. These unique academic programs help students to develop intercultural competence and multicultural awareness as they stretch their own perceptions of themselves and the world. Students are also challenged to meet the demands that come with living, traveling, and working together as a group.

Domestic Field programs are directed by a Principia full-time, continuing, faculty member and are similar in many ways to Principia study abroads. Field programs, however, are conducted in the United States.

Besides the abroad and field programs operated by the Study Abroad Office, classes sometimes also have both domestic and international field opportunities.

Academic internships give students the opportunity to participate in work environments while receiving academic credit. Students work with a Principia College faculty member who assists in developing the learning contract, maintains contact with the student during the internship, and gives a grade based on the learning contract.

To be eligible for an off-campus internship, students must be in good academic standing. Exceptions must be approved by Scholastic Committee. The academic department sponsoring the internship determines the level of writing proficiency required for a specific internship.

At least one term prior to the intended internship, a qualified student should complete the formal process of developing and obtaining approval of an Internship Learning Contract between him/herself and Principia.

Check the published academic calendar for specific due dates.

For information on tuition charges see Fees and Personal Expenses (p. 239).

Courses of Instruction

Introduction

See Course Descriptions (p. 139) for a list of the courses in the college's curriculum. A list of subjects and their corresponding subject codes appears on this page. See Departmental Programs (p. 38) for descriptions of major and minor programs.

Course Numbering

Course numbers reflect the level of students for which the course is primarily designed and offered. Please see Registration Rules (p. 263) for a fuller explanation of the course numbering system.

001-099	Non-credit; open to all levels.
100-199	Introductory level; most appropriate for underclassmen.
200-299	Intermediate level; most appropriate for sophomores and juniors, but open to all
300-399	Advanced level; most appropriate for upperclassmen.
400-499	Advanced independent or seminar courses; most appropriate for upper-class majors.

Credit Value

The number to the right of the title indicates the amount of credit the course carries.

- Semester Hours (SH) count toward the 120 semester hours required for graduation.
- No Credit indicates courses that carry no academic credit.

Requirement Codes

General education requirements are indicated to the far right of the course subject heading and number. An attribute code in brackets [], indicates a course that will fulfill one of the general education Liberal Arts Distribution Requirements (LADR) that became effective Fall 2011. An attribute code in angle brackets < > indicates the new General Education Mathematics (GEM) code effective Fall 2014. Please see the current Liberal Arts Distribution Requirements (p. 27) and the appropriate catalog for previous requirements.

Fees

When a course has a special fee (for laboratory materials, etc.), the fee is listed at the end of the course description. The fees are subject to change. Consult the course schedule for the fee in effect when a course is taught.

Prerequisites

If a course requires special preparation or background, the prerequisite will be listed in the course description. Any prerequisite may be waived at the discretion of the instructor. Students are encouraged to consult faculty directly to determine preparedness.

Schedule of Courses

Many courses are taught at least once a year. Others are offered in alternate years. Some are offered only upon sufficient demand, by independent contract, or on off-campus programs.

A course schedule for the current term is available online or can be viewed on the bulletin board outside the Registrar's Office. A tentative course schedule for the following term is also available.

The college reserves the right to add, remove, or modify the courses in its curriculum.

Subject Headings and Subject Codes

Subject Headings	Subject Codes
Art: Art History	ARTH
Art: Studio Art	ARTS
Biology and Natural Resources	BNR
Business Administration	BUAD
Careers	CAR
Chemistry	CHEM
Computer Science	CSCI
Dance	DANC
Earth Science	ERTH
Economics	ECON
Educational Studies	EDST
Engineering Science	ENGR
English	ENGL
French	FREN
General Education	GEN
German	GER
Global Studies	GLBS
History	HIST
Languages and Cultures	LANG
Mass Communication	MCOM
Mathematics	MATH
Music	MUS
Philosophy	PHIL
Physical Education: Academic Courses	PHED
Physical Education: Activity Courses	PE
Physical Education: Varsity Sports	PVAR
Physics	PHYS
Political Science	POLS
Religious Studies	RELS
Russian	RUSS
Science	SCI
Sociology and Anthropology	SOAN

Spanish	SPAN
Special Studies	SPST
Sport Studies	SPRT
Sustainability	SUS
Theatre	THEA
Women's and Gender Studies	WOM
World Literature	WLIT
Writing	WRIT

Course Descriptions

Art: Art History (ARTH)

ARTH 100 Intro to Western Art to 1400 3.0 SH [GEA]

This course surveys the visual arts in their many facets from prehistoric times and ancient Mesopotamia, Egypt, Greece, and Rome, through medieval Europe. Sometimes known as "from caves to cathedrals," this course introduces students to fundamental principles for the study of art history and theory, and the verbal language that unites the visual arts.

Class Level Restriction: Freshman and Sophomore only.

ARTH 101 Intro:Western Art 1400-Present 3.0 SH [GEA]

This survey course begins with the Renaissance in Northern Europe and Italy, and chronologically studies the major innovations in painting, sculpture, architecture, and other visual arts, introducing students to fundamental principles for the study of art history and theory, and the verbal language that unites the visual arts.

ARTH 110 Survey Asia/Africa/Americas 3.0 SH [GEA]

This course surveys the art of South and Southeast Asia, China, Korea, Japan, the Americas, the Pacific, and Africa from their beginnings to the present. It introduces key vocabulary terms, methods for understanding the meaning of the various works, the cultural context in which these works were formed, and the role of the artist in society.

ARTH 132 Themes in Renaissance Art 3.0 SH [GEA]

This course studies the art and architecture of Italy and Northern Europe from 1300 to 1600, focusing on the changing opportunities available to artists, the impact of liberal arts education on artists' and architects' success, and the means by which artists and architects became recognized as independent creative individuals.

Class Level Restriction: Freshman only.

ARTH 200 Ancient Art 3.0 SH [GEA]

This course explores the sculpture, architecture, painting, and other visual arts of the ancient classical world, beginning with the earliest Aegean cultures, giving special attention to issues of art and life in various Greek centers.

ARTH 203 Medieval Art 3.0 SH [GEA]

This course opens with Early Christian and Byzantine art and architecture, explores the innovations in manuscript production, the ideals of the world of Charlemagne, the majesty of Romanesque churches, and the dazzling color, light, and space of Gothic cathedrals.

ARTH 205 Topics in Art History 3.0 SH [GEA]

This course is designed to provide a close look at specific topics in the history of art. Topics might include courses linked to local exhibitions of important works of art, traditions of special interest to abroad programs, or courses organized around the special expertise of visiting faculty. The title will be extended to describe the current topic. May be taken more than once, provided the topics differ.

- ARTH 230 Asian Art** **3.0 SH** **[GEA]**
 This course examines bronzes, ceramics, paintings, sculpture, architecture, and other visual arts of the Asian world in their socio-political and historical contexts.
- ARTH 232 Art of the Italian Renaissance** **3.0 SH** **[GEA]**
 This course explores art and architecture in Italy in the 15th and 16th centuries including major works by such world-famous artists and architects as Leonardo da Vinci, Michelangelo, Raphael, and Palladio. It explores the achievements of artists in major centers - Florence, Rome, and Venice - and in courtly settings, and how they preserved their culture.
- ARTH 234 17th-18th Century Art** **3.0 SH** **[GEA]**
 This course studies paintings, sculpture, architecture, and other visual art in Europe from 1600 to the end of the 18th century, from Bernini to Vermeer, David to Houdon, with special attention to the emergence of influential women artists such as Artemisia Gentileschi and Angelica Kauffmann.
- ARTH 235 19th Century European Art** **3.0 SH** **[GEA]**
 This course investigates the work of artists in Spain, France, Germany, and Great Britain during the nineteenth century, with an emphasis on how their art was influenced by different national perspectives.
- ARTH 237 20th Century Art** **3.0 SH** **[GEA]**
 This course examines the major artistic movements of the 20th century, including Fauvism, Cubism, Expressionism, Abstract Expressionism, and performance art. How the historical and socio-political contexts shaped artistic expression is a major consideration, along with the initiative of individual artists.
- ARTH 258 Art in the USA** **3.0 SH** **[GEA]**
 This course traces the innovations and achievements of visual artists in the USA from the eighteenth through the twenty-first centuries with particular emphasis on artists' responses to themes such as wilderness, the growth of cities, the industrial revolution, war and peace, women's rights, urban life, and internationalism.
- ARTH 260 History of Photography** **3.0 SH** **[GEA]**
 This course explores the history of photography from its early-19th-century origins to the present, giving special attention to the innovations of such major figures as Daguerre and Niépce, Henry Fox Talbot, Nadar, Stieglitz, Ansel Adams, Cindy Shearman, Andy Warhol, and other 21st-century photographers.
- ARTH 282 Islamic Art** **3.0 SH** **[GEA]**
 This course examines Islamic art from its beginnings in the Arabic peninsula through its response to local traditions in Syria and Palestine, and its expansion into Egypt, Spain, North Africa, and India.
- ARTH 285 20th Century Architecture** **3.0 SH** **[GEA]**
 This course covers major movements of 20th-century architecture, including the Arts and Crafts movement, Modernism, Post-Modernism, and contemporary movements, as well as urban planning.
- ARTH 300 Adv Studies/Ancient** **3.0 SH** **[]**
 This seminar studies current issues in ancient Greek and Roman art and architectural history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various approaches. May be repeated up to a total of six semester hours provided the topics differ.
Prerequisite: ARTH 200.
Class Level Restriction: Junior and Senior only.
- ARTH 304 Advanced Topics in Art History** **3.0 SH** **[]**
 This seminar studies current issues in art history. Topics related thematically will vary, and may relate to special exhibitions at the St. Louis Art Museum or other local museums. The emphasis is on research/writing, oral presentation, and various approaches. The title will be extended to describe the current topic. May be repeated up to a total of 12 semester hours provided the topics differ.
Class Level Restriction: Junior and Senior only.

ARTH 332 Adv Studies/Medieval & Renaiss 3.0 SH []

This seminar studies current issues in Medieval and Renaissance art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various approaches. May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

ARTH 354 Adv Studies/17th-18th C Art 3.0 SH []

This seminar studies current issues in 17th- and 18th-century art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various approaches. May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

ARTH 355 Adv Studies/19th-20th C Art 3.0 SH []

This seminar studies current issues in the history and theory of 19th- and 20th-century art. Topics treated thematically will vary and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various methodological approaches. May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

ARTH 449 Capstone Proposal 1.0 SH []

This seminar course prepares students to write their capstone. Students research possible topics and create a reading list in order to develop a written proposal for their capstones.

Class Level Restriction: Junior and Senior only.

ARTH 450 Capstone 3.0 SH []

This Capstone course involves guided research, writing, and discussion with the faculty member of record, and should culminate in a Capstone research paper of 30 or more pages, accompanied by an annotated bibliography.

Prerequisite: ARTH 449.

Class Level Restriction: Senior only.

Art: Studio Art (ARTS)**ARTS 105 Ideas and Visual Form 3.0 SH [GEA]**

Introduction to the components of visual expression: subject matter, form, and content. Topics include composition, perspective theory, drawing, three-dimensional construction, and basic color exploration. Practice includes studio as well as on-location work outside of regular class hours.

Class Level Restriction: Freshman and Sophomore only

Fee=\$50.00.

ARTS 150 Drawing I 3.0 SH [GEA]

Continued study of line and value including additional perspective and composition studies, focusing primarily on the development of facility and perception. Emphasizes both technical and abstract observations.

Fee=\$50.00.

ARTS 170 Graphic Design I 3.0 SH [GEA]

In this course students will learn the foundational skills of creating graphic design using the principles of form and structure, and explore how graphic content shapes the structure of visual compositions. Demonstrations and instruction will engage students in developing conceptual thinking and visual problem-solving skills, observational/presentation skills, knowledge of basic typography, and design software tools.

Fee=\$75.00.

- ARTS 230 Color Studies** **3.0 SH** **[GEA]**
 Using color as a means of conveying individuality through art is unparalleled in context with any other element of design. Studio assignments and lecture notes focus on the artistry, physics, chemistry, psychology and metaphysics of color. Students build a concise portfolio demonstrating an understanding of color interaction and perception.
Fee=\$75.00.
- ARTS 250 Drawing II** **3.0 SH** **[]**
 Moving beyond the basic skills gained in Drawing I, the central purpose of this course is to expand the student's concept and practice of drawing -- that is, to enlarge the student's pool of sources for ideas and to develop an understanding of the virtually limitless approaches to drawing. This will occur technically, conceptually, and aesthetically.
Prerequisite: ARTS 150.
Fee=\$70.00.
- ARTS 251 The Language of Drawing** **3.0-4.0 SH** **[GEA]**
 An immersive study of on-location drawing practices and techniques where drawing becomes a tool for observation and recording of cultures, historical sites, and landscapes. Drawing will also be explored as a vehicle to communicate content. This course develops skills in composition, observation, facility with mixed-media, drawing terminology, critiquing and perspective. May be repeated if associated with a different abroad/field program.
- ARTS 255 Field Research Journal** **2.0-3.0 SH** **[]**
 An in-depth focused study of techniques and processes for visual observation and recording of information in the field. Mapping, writing, memory drawing, diagraming, and other methods will be explored, learned, and used. Students use the journal to daily record and organize data, problem solve ideas, and prepare ideas for communicable visual solutions. Offered only on abroad programs.
- ARTS 256 Exhibition Project Management** **1.0 SH** **[]**
 This course is designed to develop skills in the layout and design of a visual exhibition. Students will apply the general principles of effective communication, develop skills in organizing and managing content, and develop skills in working as a creative team. An understanding of planning, research, and audience will be emphasized. May be taken up to three times.
- ARTS 265 Typography** **3.0 SH** **[]**
 An introduction to the study of the letterform as a foundational skill in graphic design. The course focuses on how typography can be used as a communicative device as well as a graphic, compositional and expressive element. Projects will explore letterform anatomy, letterform analysis, measuring systems, typographic identification, and practical issues of setting and using type effectively.
Prerequisite: ARTS 170.
Fee=\$45.00.
- ARTS 270 Graphic Design II** **3.0 SH** **[]**
 This course builds on the foundational skills developed in Graphic Design I and becomes more technical and intricate with the media/assignments. Emphasis is placed on the design process, the quality of the concepts, and designed outcomes. Projects explore large/small scale design, visual identity and communication, typography, information design, and package design. Students practice skills both individually and in teams.
Prerequisite: ARTS 170.
Fee=\$75.00.
- ARTS 277 Photography as Fine Art** **3.0 SH** **[]**
 This course is an exploration of contemporary visual artists with particular emphasis on photography based work. Students will explore how and why this work can or is influencing their artistic practice. Students will develop skills in conceptualization, post production image manipulation, and make images with a strong aesthetic focus. The overall goal is to develop a cohesive fine art portfolio.
Prerequisite: ARTS 105 or ARTS 150 or ARTS 170 or MCOM 181.

- ARTS 280 Printmaking** **3.0 SH** []
 An introduction to basic printmaking areas: relief printing, mono-printing, and other contemporary printing methods. Emphasis is placed on the student's original development of ideas and imagery. Aesthetic and theoretical issues concerning the influence of digital imagery will also be explored. A printmaking portfolio is the major outcome of the course.
Prerequisite: ARTS 105 or ARTS 150.
Fee=\$75.00.
- ARTS 285 Illustration** **3.0 SH** []
 An introduction to the broad based thinking skills required to illustrate verbal communication in various manifestations. Several formats will be utilized reflecting the instructor's strengths: book, poster design, musical interpretation, scientific rendering, and communication arts. Mixed media will frequently be engaged. Emphasis is on the book as an art form - as a valuable professional activity.
Prerequisite: ARTS 105 or ARTS 150 or ARTS 220.
Fee=\$50.00.
- ARTS 290 Web Design** **3.0 SH** []
 Introduction to the design/management of web sites with an emphasis on the development of design strategy processes. This course builds skills in terminology, design principles, and visual problem solving. Students learn skills in organizing information, loading and maintaining web pages, applying design theory and page layout, overcoming technical challenges, and publishing a portfolio site showcasing the class projects.
Prerequisite: ARTS 170.
- ARTS 295 Sustainable Design** **3.0 SH** []
 This course is based on the analysis of green design in the built environment. The course content and organization model the breadth of societal cooperation necessary to solve sustainability problems while it explores the principles of current energy strategies. The course also teaches basic visual communication skills, drafting practices, discussion techniques, and culminates in a build-design project.
Prerequisite: ARTS 105.
Class Level Restriction: Sophomore and Junior and Senior only
Fee=\$50.00.
- ARTS 298 Designing in Space** **3.0 SH** []
 Examines a specific topic in studio art practice that includes spatial elements such as those used in kinetic art, architectural and product design, and installation and public art. As a studio course, it helps students cultivate a creative practice that incorporates multi-disciplinary elements in their personal artwork; it also includes exposure to current dimensional themes. This course is built around the special expertise of the faculty. Open to all with at least one previous studio art course. A specific topic can only be taken once.
Fee=\$50.00.
- ARTS 299 Experimental New Media Seminar** **3.0 SH** []
 Examines a specific topic in studio art practices that may include sound, video, photography, motion, design, and installation. The course is built around the special expertise of the faculty. The title will be extended to describe the current topic. May be repeated once up to a total of six semester hours provided the topics differ.
Prerequisite: ARTS 105 or ARTS 150 or ARTS 170.
Fee=\$100.00.
- ARTS 301 Portraiture** **3.0 SH** []
 For the student seeking experience in drawing the human form. Focus includes grounding in specific drawing skills, including ability to represent proportion, anatomic architecture, volume, and experience with various mediums. Learning about major practitioners of the genre will instill an appreciation for portraiture - it's usefulness and influence as an important art form for content in past and present art.
Prerequisite: ARTS 150 or permission of the instructor.
Class Level Restriction: Junior and Senior only
Fee=\$50.00.

- ARTS 302 Figure Studies** **3.0 SH** []
 The human figure is used as a vehicle for exploring issues of fine drawing. Includes proportion, anatomy, gesture, content, and some historical background. May be repeated with instruction at increasingly advanced levels.
Prerequisite: ARTS 105 or ARTS 150.
Class Level Restriction: Sophomore and Junior and Senior only
Fee=\$100.00.
- ARTS 304 Sculpture II** **3.0 SH** []
 Fundamental principles of modeling from a live model are the focus. These include studies in proportion, surface interpretation, and gesture. Students will engage with historical, contemporary, and aesthetic aspects of figurative expression. All assignments will culminate in a conceptual figurative work for the student's portfolio and include the technical knowledge of mold making.
Prerequisite: ARTS 105.
Class Level Restriction: Junior and Senior only
Fee=\$100.00.
- ARTS 310 Oil Painting II** **3.0 SH** []
 Builds on knowledge gained during the introductory course. Oil II constitutes a further development of skills and image making paired with strong emphasis on research, critical discourse, and experimentation in handling of medium. Students will develop research and production models that reflect contemporary painting practices.
Prerequisite: ARTS 210.
Fee=\$100.00.
- ARTS 320 Watercolor Painting II** **3.0 SH** []
 Focused introduction to the process of developing large studio paintings based upon varied field observations, advanced watercolor techniques, and critique skills. Concentration on development of individual style or "point of view." This studio course will require that a majority of work be completed outside of the studio class time.
Prerequisite: ARTS 220.
Class Level Restriction: Junior and Senior only
Fee=\$100.00.
- ARTS 325 Art and Critical Theory** **3.0 SH** []
 This course examines significant ideas and issues in art theory and criticism from 1930 through the present. Learning about a range of critical lenses from formalism through post-structuralism and post-colonialism, students will explore foundational and contemporary texts about art. The readings embrace an emphasis on the relation of art to society. Strongly recommended for students applying to graduate school.
Prerequisite: ARTH 237.
Class Level Restriction: Sophomore and Junior and Senior only.
- ARTS 330 Studio Seminar** **1.0-6.0 SH** []
 Group study of selected topics in art. The title will be extended to describe the current topic. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours provided the topics differ.
Class Level Restriction: Sophomore and Junior and Senior only.
- ARTS 333 Painting III** **3.0 SH** []
 This advanced course engages the student in the practice and process of painting in relation to contemporary and historical approaches. Various painting strategies are introduced and investigated and inform the development of individual painting projects. ARTS 333 offers solid preparation for working on the capstone exhibition.
Prerequisite: ARTS 310 or ARTS 320.
Class Level Restriction: Junior and Senior only
Fee=\$125.00.

- ARTS 350 Drawing III** **3.0 SH** []
 An intense exploration of the relationship of visual language to content in art via mixed drawing media. Production of several different series formats and a focused preparation of a portfolio quality series are covered during the term. Preparation of an aesthetic statement.
Prerequisite: ARTS 150 and either ARTS 250 or one painting course.
Class Level Restriction: Junior and Senior only
Fee=\$50.00.
- ARTS 360 Figurative Painting** **3.0 SH** []
 For the student who benefits from painting and is ready to revisit the figure within new technical and aesthetic contexts in painting. The first half is comprised of working directly from the model with frequent critiques. Includes exploration of conceptual content and creation of a large scale painting. May be repeated once at an advanced level of instruction.
Prerequisite: ARTS 210 or ARTS 220, and ARTS 302.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Studio Art Majors only.
Fee=\$100.00.
- ARTS 370 Advanced Design Practices** **3.0 SH** []
 Examination of professional graphic design practices within the context of a design consulting firm or as a free-lance graphic designer. Specialized activities/problems that commonly occur inside a design office are explored. Students work in design teams, design over a network, learn research methods, and create a portfolio of forms/contracts used in the field. Instructional methods: lectures, discussion/critiques, demonstrations, and readings.
Prerequisite: ARTS 170 and ARTS 270.
Class Level Restriction: Junior and Senior only
Fee=\$75.00.
- ARTS 383 Sculpture III** **3.0 SH** []
 Large-scale public sculpture is a class wherein each student designs and builds an original sculpture. Working through a conceptual beginning, developing a plan, completing drawings, forming a budget, and writing a proposal. Each student will construct it, site it, and install their own approved creation. This process places emphasis on individual and career development.
Prerequisite: ARTS 304.
Class Level Restriction: Junior and Senior only.
- ARTS 390 Advanced Web Design** **3.0 SH** []
 The course builds on the skills developed in ARTS 290 and expands those skills with more intricate and complex problems. The course will include focus on UX and UI design. The course will also include projects that develop skills in working with CSS and HTML.
Prerequisite: ARTS 290.
- ARTS 401 Creative Research Project** **3.0-6.0 SH** []
 An in-depth focused study in the visual arts shaped by previous studio art course work. Teaching methods include critical readings in professional art journals, open studio practice, weekly critique, and museum/studio field trips. Students present research and creative output in critique sessions with other students and at least one studio art faculty. May be offered for variable credit from three to six semester hours. May be taken twice up to a total of six semester hours.
Prerequisite: six ARTS courses.
Class Level Restriction: Junior and Senior only.
- ARTS 402 On-Location Studies** **1.0-6.0 SH** []
 Offered by permission of the program faculty to students enrolled in field-oriented classes such as internships or off-campus independents. Course work provides opportunity for in-depth, individual research based upon previous studio classes at Principia College. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours.
Class Level Restriction: Junior and Senior only.

- BNR 161** **Field & Natural History** **4.0 SH** **[GESL]**
 Studies of local plants and animals in their natural environment and in their relation to humankind. Emphasis on conservation, nature interpretation, and observation and field research skills.
Class Level Restriction: Freshman and Sophomore only
Fee=\$30.00.
- BNR 190** **Global Environmental Issues** **3.0 SH** **[GESN]**
 Exploration of major environmental issues that are global in scale. By examining topics such as deforestation, agriculture, climate change, and the worldwide decline of biological diversity, students will learn to think critically about environmental issues. They will also learn to recognize and sort through the many conflicting perspectives that surround most of these issues. Special emphasis is placed on the role of science in helping to identify and solve global environmental problems. Designed primarily for students intending to major in biology or environmental studies.
Class Level Restriction: Freshman and Sophomore only.
- BNR 191** **Introduction to Ecology** **4.0 SH** **[GESL]**
 Exploration of fundamental concepts relating to ecosystem structure and function, including the interactions of plant and animal populations within biological communities, and the role of abiotic factors in shaping those populations and communities. Emphasizes basic methods of field research, data analysis, and scientific writing. Designed primarily for students intending to major in biology or environmental studies.
Corequisite: BNR 111, BNR 112, BNR 201.
Class Level Restriction: Freshman and Sophomore only.
- BNR 201** **Methods in Research & Writing** **4.0 SH** **[]**
 Course emphasizes a broad range of skills essential to successful work in biology or environmental studies. Skills include reading and analyzing scientific literature, designing and conducting lab and field research projects, data management and analysis, scientific writing, and presentation techniques. Designed primarily for students intending to major in biology or environmental studies.
Corequisite: BNR 111, BNR 112, BNR 191.
Class Level Restriction: Freshman and Sophomore only.
- BNR 215** **Biometry** **3.0 SH** **[]**
 This course provides an introduction to statistics emphasizing applications to biology and natural resource management. Topics include descriptive statistics, distributions, confidence intervals, T-tests, correlation, linear regression, analysis of variance (ANOVA), multiple and nonlinear regression, multiple ANOVA, and nonparametric statistics. The course emphasizes application of statistical methodology. (A student may receive credit for only one of the courses BNR 215 or MATH 164.)
Prerequisite: BNR 201 or permission of instructor.
Field of Study Restrictions: Biology, Environmental Studies Majors only.
- BNR 220** **Marine Biology** **3.0 SH** **[]**
 This survey course covers a broad range of subject areas in marine biology including basic oceanography, biology of life in the seas, and management/conservation of oceanic biological resources. Also focuses on learning about marine ecosystems (types, locations, and biological structure).
Prerequisite: BNR 112.
- BNR 225** **Indigenous Ecol Knowledge** **3.0 SH** **[]**
 The course provides an introduction to the ways in which indigenous people understand the world and the land. Special attention will be paid to interactions between indigenous knowledge and Western science. Students will explore aspects of indigenous ecological knowledge and the role it plays in contemporary ecology. The relevance of indigenous knowledge to contemporary resource management will also be explored.
- BNR 230** **Ornithology** **4.0 SH** **[GESL]**
 Study of birds: their structure, identification, classification, habits, life history, distribution, migration, methods of attraction, economic importance. Field identification and behavioral study of local species.

BNR 231 Herpetology 4.0 SH [GESL]

A survey of the biology of reptiles and amphibians. Topics covered include evolutionary origins, morphology, life history, ecology, and identification, emphasizing Principia College campus species. Field work, collecting, and identifying the Principia herpetofauna constitute a significant portion of the course. Students undertake a research project on the amphibian or reptile of their choice.

BNR 232 Wildlife Conservation 3.0 SH []

This course explores major local and global wildlife issues focusing on the impacts of population growth, land use, tourism, development, and other human activities. This course also examines a range of conservation and planning strategies to protect wildlife species.

BNR 236 Sea Turtle Biology 3.0 SH []

This course teaches the biology of sea turtles (evolution, anatomy, physiology, behavior, life history, and population dynamics) and their conservation needs. Basic ecological concepts are integrated with related topics of conservation and management of endangered species, the contributions of technology to the management of migratory marine species, and the role of research in national and international law and policy.

BNR 237 Sea Turtle Biology: Trinidad 4.0 SH [GESL]

This course teaches the biology of sea turtles (see description for BNR 236) and their conservation needs. During spring break students travel to Trinidad in the Caribbean to study marine turtles. They assist in ongoing research, as well as interact with local resource managers in a "real world" context where the complexities of biodiversity conservation can be learned. (A student may receive credit for only one of the courses BNR 236 or BNR 237.)

Fee=\$760.00.

BNR 245 Natural History 2.0-4.0 SH [GESL]

This course focuses on the study of the natural history of flora and fauna in a specific country or region. Ecosystems studied may include: marine, alpine, forest, grasslands, riverine. Offered on Principia abroad only, with a star (*) grade until following midterm. May be offered for variable credit from two to four semester hours. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

BNR 255 Natural Resources Management 4.0 SH [GESL]

This course focuses on the biological and physical science aspects of natural resource management at local, national, and global scales. Topics covered include management of soil, water, forest, coastal, and wildlife resources. In the laboratory exercises, students learn field measurement techniques and computer skills commonly used in managing natural resources as well as learn how to write scientific lab reports.

BNR 256 Conservation Genetics 4.0 SH []

Classical and modern genetic theory and technique, with an emphasis on the role of genetic variability in the development of species, and in the conservation of biodiversity.

Prerequisite: BNR 111 or BNR 112.

BNR 264 Sugarbush Management 4.0 SH [GESL]

Course exposes students to historical, scientific, business, and conservation aspects of managing a maple-dominated woodland for syrup production. Central to this course is the planning and implementation of a small-scale "sugarbush" on the college campus, complete with tapping, evaporating, and marketing the final product.

Fee=\$30.00.

BNR 280 Plant Taxonomy 4.0 SH []

Study of plant families illustrated by their morphology and reproductive structures. Emphasis is on the development of skills used to identify and classify plants in the field.

Prerequisite: BNR 111.

BNR 290 Environmental Policy 3.0 SH []

This course includes the formulation and implementation of environmental policy, with special reference to the impact of political and economic factors. Specific consideration will be given to major environmental regulations.

- BNR 293 Soil and Water Conservation 3.0 SH []**
 Past and present issues in soil and water conservation will be examined. Principles of erosion, conservation tillage, irrigation, and drainage will be discussed. Agencies and programs responsible for soil and water conservation will be studied. Current issues such as integrated watershed management, water conflicts and cooperation, organic agriculture, urban agriculture, and green roofs will also be investigated.
Prerequisite: BNR 191.
Class Level Restriction: Sophomore and Junior and Senior only.
- BNR 312 Grassland Ecology 4.0 SH []**
 Exploration of the structure and function of grassland ecosystems. Topics include the evolutionary history of the grassland biome, interactions between plants and animals in grasslands, and the effects of fire, grazing, and climate on grasslands. Introduces students to key papers on grassland ecology, as well as current field research methods.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 313 Forest Ecology 4.0 SH []**
 An exploration of the structure and function of forested ecosystems, with an emphasis on field research and scientific writing. Topics include succession, disturbance, landscape variation, nutrient cycling, tree identification, and ecosystem stability. This course builds on the fundamentals learned in Introduction to Ecology and introduces students to contemporary ecological thinking.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 315 Freshwater Ecology 4.0 SH []**
 A survey course in the ecological functioning of lakes, rivers, streams, and wetlands. The course has a special focus on the great rivers of the Midwest, including their ecological and environmental problems. Students learn field skills needed to conduct ecological research and write scientific lab reports and a final research paper on freshwater ecosystem topics.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 317 Wetland Ecology 4.0 SH []**
 The study of bogs, fens, swamps, bottomland hardwood forests, salt marshes and mangroves with an emphasis on the formation, hydrology, biogeochemistry, and community dynamics of these systems. Management, policy, and restoration strategies will also be discussed. Students will learn field skills needed to conduct wetland research and write lab reports and a final research paper on wetland ecosystem topics.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 325 Wildlife Management 4.0 SH []**
 This course is designed to give students an understanding of wildlife and conservation management methods. Covers techniques in population estimation, radio and satellite telemetry and other electronic data gathering methods as well as studying when and how to apply such methods. The course combines lecture and field work, with a heavy emphasis on the field work.
Prerequisite: BNR 112.
Class Level Restriction: Junior and Senior only.
- BNR 340 Adv Natural History 2.0-4.0 SH []**
 An advanced course that focuses on natural history of flora and fauna in a specific country or region. It also focuses on the ecological dynamics of populations, communities, and ecosystems in the region. Case studies are drawn from a variety of systems including marine, freshwater, forest, grassland, alpine and other ecosystems. May be offered for variable credit from two to four semester hours. The title will be extended to describe the current country or region. May be taken more than once provided the regions differ.

- BNR 356 Global Change Biology** 3.0 SH []
 This course examines changes in Earth's atmosphere, soils, and waters, the distribution of heat and precipitation, the continuity of landscapes, and exotic species invasions. Responses are examined at multiple levels of biological organization. Special attention is paid to positive and negative feedback loops. The course relies on current scientific literature and requires synthesis of diverse physical and biological sciences.
Prerequisite: BNR 111, BNR 112, BNR 191, BNR 201, and any 300-level BNR course.
Class Level Restriction: Junior and Senior only.
- BNR 360 Vertebrate Zoology** 4.0 SH []
 Studies include the evolutionary development of vertebrates, from their origins to the divergence of groups. It focuses on comparative anatomy to understand common ancestral linkages. Students study the broad diversity of modern vertebrates, including life histories, physiology, and ecological adaptations. Laboratory work focuses on anatomy as well as key features of the major vertebrate groups.
Prerequisite: BNR 112.
Class Level Restriction: Junior and Senior only.
- BNR 362 Conservation** 2.0-4.0 SH [GESN]
 This course focuses on how natural resources of a given country are managed. Students study conservation management strategies of representative ecosystems as well as species management and the interface of native culture and resource conservation. Offered on Principia abroad only, with a star (*) grade until following midterm. The title will be extended to describe the current country. May be offered for variable credit from two to four semester hours.
Class Level Restriction: Junior and Senior only.
- BNR 380 Advanced Ecology Seminar** 1.0-3.0 SH []
 Offered when regular or visiting faculty are available to work with students on selected topics in ecology. Recent topics have included ecological modeling and soils ecology. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- BNR 381 Adv Natural Resources Seminar** 1.0-3.0 SH []
 Offered when regular or visiting faculty are available to work with students on selected topics in natural resources conservation. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- BNR 390 Forest Resource Management** 4.0 SH []
 A course in the ways we manage forest lands to provide an array of goods and services to mankind. This course teaches the concepts of sustainable forestry and the field techniques that allow the manager to evaluate, plan, and implement forest management activities. Students learn specific skills in forest measurements, applied silviculture, and the use of management decision support tools.
Prerequisite: BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 400 Senior Thesis Seminar** 1.0 SH []
 This course is designed to assist senior biology and environmental studies majors as they design, conduct, and plan for the presentation of a capstone project. Weekly class activities may include presentations from the research librarian, discussions with BNR faculty about project design and methodology, preparation of an annotated bibliography and coaching on presentation skills and technology. Students develop a formal research proposal and a plan for the project. Open only to biology or environmental studies majors.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Biology, Environmental Studies Majors only.

BNR 401 Senior Thesis 1.0-6.0 SH []

Project selected in accordance with student's qualifications, interests, and needs. May be taken for variable credit from one to six semester hours. May be taken more than once with BNR department chair approval. May be repeated up to a total of 12 semester hours.

Prerequisite: five or more BNR courses numbered above 150 including BNR 400.

Class Level Restriction: Senior only.

BNR 402 Internship 1.0-6.0 SH []

An opportunity to gain practical experience in biology, natural resource conservation, environmental policy, consulting, and many other related environmental fields. Recent student internships have included waterfowl research for the U.S. Fish and Wildlife Service, amphibian research in Puerto Rico, coyote behavior studies in Yellowstone, and aquarium management at the New England Aquarium. May be taken for variable credit from one to six semester hours. May be taken more than once if topics differ. Offered on an independent contract basis.

Class Level Restriction: Junior and Senior only.

BNR 403 Biology Research Experience 3.0-6.0 SH []

This course is designed to give the student the opportunity to conduct guided research as a research assistant in biology, natural resource conservation, or other environmental fields. The student will undertake original research while gaining practical experience as a research biologist. Depending on the project the student may spend some of, or the whole semester, off campus. May be taken for variable credit from three to six semester hours. May be repeated up to a total of nine semester hours. Open only to biology majors.

Prerequisite: BNR 111, BNR 191, and BNR 201, and at least one of the following: BNR 312, BNR 313, BNR 315.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Biology Majors only.

BNR 410 Senior Readings 3.0 SH []

This course introduces students to seminal pieces of environmental literature and to cutting edge thinking on environmental problems. Students are responsible for reading assigned materials and participating in seminar discussions. The course challenges students to define and defend their personal values regarding environment and to become active citizens in the environmental issues facing society.

Prerequisite: five BNR courses.

Class Level Restriction: Junior and Senior only.

Business Administration (BUAD)**BUAD 090 Business Internship 0.0 SH []**

Professional internship in an off-campus, 3rd party business setting that will prepare the student for a career in business. Position may be in any area of marketing, finance, operations, or management but must provide a professional career-based experience. The internship supports the Business Administration major by providing context and experience relative to the concepts taught within the major.

Field of Study Restrictions: Business Administration Majors only.

BUAD 110 Discovering Business 3.0 SH [GESS]

A course specifically designed for non-majors offering a new approach to the integrated discovery of basic business concepts. Students gain an understanding of how economics, entrepreneurship, management, marketing, accounting, finance, and business ethics all work together in the successful enterprise. Case studies involving companies, business leaders and entrepreneurs, as well as team projects, make business principles relevant for the student.

BUAD 140 Innovation! 3.0 SH [GESS]

Innovation is a core 21st-century skill. This course uses design thinking, lean entrepreneurship, and prototyping as the means of developing creative confidence and rapidly creating a successful new product or service. Multiple design projects are used.

Class Level Restriction: Freshman and Sophomore only.

- BUAD 161 Business Analytics** 3.0 SH []
 Covers the business use of analytical methods such as decision trees, scorecards, forecasting, clustering, regression and optimization to solve business problems and make business decisions. Descriptive, inferential and predictive statistics and probability are covered as the foundation of business analytic decisions and the study of operational variability. A business analytic team project is included.
Class Level Restriction: Freshman and Sophomore only.
- BUAD 215 Intro to Mgmt Info Systems** 3.0 SH []
 Students increase their technical perspective of business by exploring the systems, information, people, strategies, and technology delivery models that drive companies' critical digital infrastructure. Using case studies and projects, students analyze and practice the roles of IT manager, business user, technology vendor, and consultant in the context of enterprise software solutions, networks, digital media, and data platforms.
Prerequisite: BUAD 251 (with a grade no lower than C).
Class Level Restriction: Sophomore and Junior and Senior only.
- BUAD 251 Financial Accounting** 3.0 SH []
 Stresses the recording and analysis of business transactions. The accounting cycle and preparation of those financial statements required for evaluating the financial status of proprietorships and corporations are emphasized. Also covers specific categories of assets, liabilities, and equity, including corporations. Includes Excel applications and an Internet-based practice set.
Prerequisite: BUAD 161.
- BUAD 252 Managerial Accounting** 3.0 SH []
 Builds on the accounting principles studied in BUAD 251. The primary emphasis is the use of accounting for internal management. Cost accounting systems, accounting information for managerial decisions, tax considerations and capital budgeting are stressed.
Prerequisite: BUAD 251 (with a grade no lower than C).
- BUAD 255 Entrepreneurship** 3.0 SH []
 Students gain an understanding of how the functions of a business enterprise - management, marketing, accounting, finance, and information technology - are interrelated and interdependent. Students are assigned to a small business team in which they apply their understanding to the development of a business plan for a new venture.
Prerequisite: BUAD 140 and BUAD 320.
Class Level Restriction: Sophomore and Junior only
Field of Study Restrictions: Entrepreneurship Minors only.
- BUAD 270 Business Sustainability** 3.0 SH []
 Explores the historical and current context for sustainable business including sustainable business models that emphasize long-term value for all business stakeholders and support eco and socio-efficiency and eco and socio-effectiveness sustainability principles. Techniques are studied to embed sustainable development into the functions of business: Marketing, Accounting, Operations, Investing, Product Design, and Management. Case studies, readings, and projects are used.
Class Level Restriction: Sophomore and Junior and Senior only.
- BUAD 301 Seminar** 1.0-2.0 SH []
 A seminar in selected topics in business administration or economics. The contents will vary, and the title will be extended to describe the current topic. May be taken more than once provided the topics differ.
Class Level Restriction: Sophomore and Junior and Senior only.
- BUAD 310 Investments** 3.0 SH []
 Investment instruments including common stock, corporate and government bonds, mutual funds, options; determination of value; security analysis; investment philosophies; historical returns; crowd behavior and the lessons of history; emphasis on value-based, long-term investing.
Prerequisite: BUAD 251.
Class Level Restriction: Junior and Senior only.

BUAD 320 Marketing 3.0 SH []

An introduction to the principles of creating value for customers and building and managing strong, profitable customer relationships. Students study the nature of consumer and business-to-business markets and the role of strategic marketing planning, marketing research, pricing, distribution, and advertising. Students study and analyze contemporary cases to understand how marketing principles are used to guide decision-making in organizations.

Prerequisite: BUAD 251 (with a grade no lower than C).

Class Level Restriction: Junior and Senior only.

BUAD 321 Marketing Research 3.0 SH []

Emphasizes the role of marketing research and consumer behavior in marketing management. Topics included are research design, test marketing, secondary sources, survey research, questionnaire design and data analyses, attitude measurement, and product, pricing, and promotional research. The course emphasizes the importance of consumer focus from recognizing needs to generating pre through post purchase satisfaction.

Prerequisite: BUAD 320.

Class Level Restriction: Junior and Senior only.

BUAD 326 Multi-Channel Marketing 3.0 SH []

Interdisciplinary course open to students majoring in Business Administration or Mass Communication. The course addresses changes in the marketing environment and how an integrated approach is necessary for success. Students integrate outbound channels such as cable, radio, public relations, print, direct mail, and email with inbound channels such as blogs, social media, website optimization, and pay-per-click for superior results.

Prerequisite: business administration majors: BUAD 320; mass communication majors: MCOM 263.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Business Administration, Mass Communication Majors only.

BUAD 328 Global Strategic Marketing 3.0 SH []

Cultivate marketing global business perspectives from a strategic standpoint. Develop an ability to analyze, define, discuss, and execute the marketing process and strategies that firms require when marketing their product or services internationally. Topics will include: international marketing environment, cultural dynamics, global marketing channels, marketing to bottom of the pyramid, global advertising, and strategic alternatives & expansion, among others.

Prerequisite: BUAD 320.

Class Level Restriction: Junior and Senior only.

BUAD 330 Management 3.0 SH [GESS]

A seminar course that evaluates several major management models that have been employed internationally over the past several decades. The works of noted thought leaders in management philosophies and business models are examined and compared to current management theory and practice. The qualities required of management to be effective in planning, organizing, leading, and controlling organizations on an ethical basis are identified and stressed.

Class Level Restriction: Junior and Senior only.

BUAD 335 International Business 3.0 SH []

Business competition and strategy is global, and to successfully manage and operate an international corporation requires an understanding of complex economic, political, cultural, and governmental issues. This course uses case studies, discussions, papers, and projects to explore the methods and operational strategy of businesses and multi-nationals within a global context. ECON 203 and ECON 204 are recommended but not required.

Class Level Restriction: Junior and Senior only.

BUAD 336 Organizational Effectiveness 3.0 SH [GESS]

Students will learn about the theories and practices that create effective organizations. This course presents theories relating to the behavior of individuals and groups within formal organizations and focuses on organizational behavior, organizational structure, organizational development, and organizational change management. These theories are applied to case studies and work experiences to gain a practical understanding.

Class Level Restriction: Junior and Senior only.

- BUAD 340 Operations & Supply Chain Mgmt 3.0 SH []**
 Covering both a firm's operations and supply chain management, topics include production, logistics, quality, capacity, and inventory management. This course incorporates many applied quantitative business methods such as optimization, forecasting, and business process design.
Prerequisite: BUAD 161.
Class Level Restriction: Junior and Senior only.
- BUAD 350 Business Law 3.0 SH []**
 Fundamentals of business law. Law as a process for resolving and preventing business problems. Study of impact of law and government regulations on business organizations and activities. Practical exercise in negotiating contracts, handling lawsuits, and understanding legal principles.
Class Level Restriction: Junior and Senior only.
- BUAD 351 Intermediate Accounting 3.0 SH []**
 Builds on the accounting principles studied in BUAD 251 and BUAD 252. The primary emphasis is on intermediate financial accounting principles: statement preparation, asset accounting, liabilities and stockholder's equity accounting. Application as well as theory. Offered on demand.
Prerequisite: BUAD 252 (with a grade no lower than C).
Class Level Restriction: Junior and Senior only.
- BUAD 360 Managerial Finance 3.0 SH []**
 Fundamentals of financial management of the business enterprise. Needs for funds; financial planning; cost of capital; capital structure; dividend policy; capital budgeting; long-term financial and corporate securities; financial aspects of expansion, reorganization.
Prerequisite: ECON 204, BUAD 252 (with a grade no lower than C) and BUAD 161.
Class Level Restriction: Junior and Senior only.
- BUAD 375 New Venture Incubator 1.0-3.0 SH []**
 This course is a project-based, hands-on learning course that supports students starting businesses and new innovation product ideas. The class will support the entrepreneurial drive of students in taking steps to start and nurture their own businesses by using a lean startup model of business development that supports testing business assumptions and by encouraging entrepreneurial learning and collaboration.
Class Level Restriction: Junior and Senior only.
- BUAD 401 Business Consulting Practicum 1.0-3.0 SH []**
 Group participation in an ongoing project providing business consulting services to companies involved in retail, manufacturing, and services. Project integrates and applies students' knowledge to financial, marketing, and management situations. May be offered for variable credit from one to three semester hours. May be taken more than once, up to a total of 12 semester hours.
Class Level Restriction: Junior and Senior only.
- BUAD 404 Business Mgt Study Project 1.0-3.0 SH []**
 Offered on a field program or on a contract basis. May be offered for variable credit from one to three semester hours. Work will focus on supporting professional development through a professional project. Mentorship in the professional area of study may be provided.
Class Level Restriction: Junior and Senior only.
- BUAD 430 Strategic Management 3.0 SH []**
 Integration of the functional areas of business management in formulating and implementing the policies of the enterprise. Topics included are mission statements; industry analysis; internal SWOT analysis; corporate, business, and functional level strategies; generic and grand strategies; empowerment; restructuring; and strategic control. Course includes a capstone research paper.
Prerequisite: completion of all other business administration major requirements.
Class Level Restriction: Senior only
Field of Study Restrictions: Business Administration Majors only.

- CHEM 114 Chemistry of Art Objects/Media** 4.0 SH [GESL]
 Selected fundamentals of chemistry relevant to the creation, conservation, and preservation of art objects. Survey of pigments, dyes, paints, ceramics, glassy and metallic media, paper, lithography, engraving, and fresco. Other topics will include conservation, the museum environment, scientific examination of art, forgery detection by scientific means, and safety in the studio. Includes labs.
- CHEM 115 Introduction to Chemistry** 4.0 SH [GESL]
 A one-semester introduction to chemistry relevant to biology and environmental science. Students learn how understanding chemical concepts and chemical reactions is important to biology and environmental science. Includes labs. Prepares students for taking Organic Survey.
Prerequisite: Success in this course depends upon students having completed a high school second-year algebra course and a high school geometry course with a grade of C or above.
- CHEM 117 Food Chemistry** 4.0 SH [GESL]
 The course applies basic scientific principles to food systems and their practical applications. Chemical/biochemical reactions of carbohydrates, lipids, proteins, and other constituents in fresh and processed foods are discussed with respect to food quality and processing. Reaction conditions that affect color, flavor, texture, nutrition, and food safety are studied. Food-related lab experiments and an independent project are included.
- CHEM 131 Fundamentals of Chemistry I** 4.0 SH [GESL]
 First of a three-course introductory sequence in chemistry. Develops problem-solving and research skills. Includes atomic structure, stoichiometry, bonding, gases, liquids, and solids. Includes labs. Students should consider taking MATH 181 concurrently.
Prerequisite: Success in this course depends upon students having completed a high school second year algebra course and a high school geometry course with a grade of C or above.
Class Level Restriction: Freshman only.
- CHEM 132 Fundamentals of Chemistry II** 4.0 SH []
 Second part of the introductory chemistry sequence. Introduction to physical chemistry including solutions, kinetics, equilibrium concepts, acid-base chemistry, thermodynamics, and electrochemistry. Includes labs.
Prerequisite: CHEM 131.
Class Level Restriction: Freshman and Sophomore only.
- CHEM 133 Fundamentals of Chemistry III** 4.0 SH []
 Third part of the introductory chemistry sequence. Topics covered include nuclear, organic, and descriptive chemistry of metals and non-metals. Introduces laboratory methods of quantitative analysis and instrumentation. Topics include titrimetric and gravimetric methods of analysis, statistical treatment of data, error propagation and analysis, and instrumental techniques of chromatography and spectroscopy. Includes labs. Students should consider taking MATH 182 concurrently.
Prerequisite: CHEM 131 and CHEM 132.
Class Level Restriction: Freshman and Sophomore only.
- CHEM 201 Environmental Testing** 4.0 SH [GESL]
 Application of chemistry to field analysis of contaminants in the environment. Focuses on writing a site assessment manual for testing of air, water, and soil. Includes labs.
Prerequisite: high school chemistry or equivalent.
- CHEM 241 Research Project** 1.0-3.0 SH []
 Research under faculty supervision. May receive a star (*) grade, with final grade being assigned on completion of the project. May be taken for variable credit from one to three semester hours. May be repeated twice for a maximum of 9.0 SH.
- CHEM 260 Organic Survey** 4.0 SH []
 Principal classes of organic compounds, nomenclature, properties, reactions, essentials of structure and mechanisms. Applications to biological systems. Includes labs.
Prerequisite: CHEM 115 or CHEM 131.

- CHEM 262 Organic Chemistry I** 4.0 SH []
 First of a two-course sequence on organic chemistry. Includes major classes of organic compounds, nomenclature, structure and properties, acid-base theory, spectroscopy, stereochemistry, thermodynamics, reactions, and mechanisms. Includes labs.
Prerequisite: CHEM 133.
- CHEM 263 Organic Chemistry II** 4.0 SH []
 A continuation of CHEM 262. Includes labs.
Prerequisite: CHEM 262.
- CHEM 274 General Biochemistry** 4.0 SH []
 Molecular components of cells, metabolic and energy transfer pathways, biosynthesis, molecular genetics. Includes labs.
Prerequisite: CHEM 260 or CHEM 262.
- CHEM 301 Adv Environmental Chemistry** 4.0 SH []
 Study of the chemistry of air, water, and soil and how industries and activities affect the chemical balances in nature. Includes a laboratory section which concentrates on environmental chemical analysis.
Prerequisite: BNR 191 or CHEM 133 or CHEM 201.
Class Level Restriction: Junior and Senior only.
- CHEM 311 Phys Chem I: Thermodynamics** 4.0 SH []
 The study of classical thermodynamics both from a theoretical and an experimental viewpoint. Topics include gas laws, enthalpy, entropy, liquids, solutions, mixtures, kinetic rates, and mechanisms. Includes labs.
Prerequisite: CHEM 133 or PHYS 203.
Class Level Restriction: Junior and Senior only.
- CHEM 313 Phys Chem II: Quantum Chem** 4.0 SH []
 Quantum mechanics is developed from simple systems to the hydrogen atom to molecules. Valence bond theory, molecular orbital theory, and group theory are used along with spectroscopy to explore atomic and molecular structure. The laboratory includes one research project. Includes labs.
Prerequisite: CHEM 133 and PHYS 202.
Class Level Restriction: Junior and Senior only.
- CHEM 321 Applied Spectroscopy** 4.0 SH []
 The study of interaction of electromagnetic radiation with matter in order to elucidate its structure. Various spectroscopic techniques, including NMR, EPR, IR and atomic absorption, will be applied to identify the structures of organic and inorganic compounds. Includes labs.
Prerequisite: CHEM 262 and CHEM 311.
Class Level Restriction: Junior and Senior only.
- CHEM 333 Instrumental Analysis** 4.0 SH []
 Theory and use of analytical instruments, including infrared, UV-visible, atomic absorption and nuclear magnetic resonance spectrometers, and the gas-liquid chromatograph. Emphasis will be on laboratory use of the instruments and the interpretation of results for molecular structure determination, compound identification, and quantitative analysis. Includes labs.
Prerequisite: CHEM 133 and CHEM 263.
Class Level Restriction: Junior and Senior only.
- CHEM 441 Senior Research Project** 1.0-6.0 SH []
 Research under faculty supervision. May receive a star (*) grade, with final grade being assigned on completion of the project. May be offered for variable credit from one to six semester hours. May be repeated multiple times, but only six semester hours may be used to fulfill major or minor requirements. Open only to chemistry majors.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Chemistry BS Majors only.

Computer Science (CSCI)

CSCI 170 Intro to Computer Science 4.0 SH [GESN]

Modern computing concepts, components, history from the abacus to the modern PC. Introduction to computer arithmetic, logic, circuits, a low-level language and a high-level language, elementary systems, peripherals, networks and ethics. Encourages presentation development and delivery. Addresses the fear of technology. Does not teach computer applications (such as word processing) but explores the science of computing. Does not count toward the CSCI major or the MIS minor.

CSCI 171 Introduction to Programming 4.0 SH [GESN]

Focus on fundamental concepts of problem solving by analyzing problems and using a computer language (C++, Java, or Python) as a tool to design, code, document, and test solutions, learned through textbook study, lectures, examples, and considerable practice in the computer science programming laboratory. Professional approaches are emphasized. (A student may receive credit for only one of the courses CSCI 171 or CSCI 181.).

CSCI 181 Accelerated Intro Programming 2.0 SH []

Students entering the computer science program with considerable programming experience may take this course as a replacement for CSCI 171 as a major requirement.

Prerequisite: successful completion of a programming competency test. (A student may receive credit for only one of the courses CSCI 171 or CSCI 181.).

CSCI 182 Intro to Data Structures 4.0 SH []

In-depth coverage of programming concepts, with emphasis on data structures, including arrays, structs, class objects, stacks, queues, and lists. Algorithms and complexity analysis for searching and maintaining sorted and unsorted lists. Explicit pointer data type and dynamic allocation of memory. Introduction to object-oriented programming and recursive functions.

Prerequisite: CSCI 171 or CSCI 181.

CSCI 201 Programming Strategies 1.0 SH []

Open to students with at least two programming courses who would like to gain a knowledge of team-oriented programming strategies that enable them to solve problems quickly and accurately. This knowledge is useful in many fields of problem solving, but will also prepare them for the ACM Scholastic Programming contest. The course emphasizes fast analysis, design, and coding. May be taken up to four times.

CSCI 220 Programming Languages 4.0 SH []

A survey and comparison of programming languages, learned through study and considerable programming practice. Intended to form the programming language basis for courses in object-oriented programming and database management systems.

Prerequisite: CSCI 182.

CSCI 240 Object-Oriented Programming 4.0 SH []

Students design, code, document, and debug computer programs using classes, object-oriented design, inheritance, polymorphism, and recursion. They demonstrate problem-solving skills using object-oriented concepts.

Prerequisite: CSCI 220.

CSCI 263 Computer Software Architecture 3.0 SH []

Topics include assembly language programming and ISA design issues, low-level OS concepts including memory management, cache, I/O and process/thread management.

Prerequisite: ENGR 262.

CSCI 310 Software Engineering 3.0 SH []

Methodologies for developing and maintaining large complex software systems. Case studies and team exercises are included. Focus on complete software life cycle, including specification, design, implementation, testing, debugging, and documentation.

Prerequisite: CSCI 171 or CSCI 181.

Class Level Restriction: Junior and Senior only.

- CSCI 320 Database Management Systems 4.0 SH []**
 The utilization of database systems within organizational settings. Includes features of database management systems, various data models, database design, normalization, SQL, query optimization, various indexing techniques, and data integrity and recovery issues.
Prerequisite: BUAD 215 or CSCI 240.
Class Level Restriction: Junior and Senior only.
- CSCI 324 Web Development 4.0 SH []**
 Design and development of client and serverside web applications, using libraries, and technologies relevant as of the time of course offering. Coverage of scripting language concepts including closure, dynamic typing, and prototypes. The class is project-oriented, and students will complete a significant web application.
Prerequisite: CSCI 320.
Class Level Restriction: Junior and Senior only.
- CSCI 330 Operating Systems 3.0 SH []**
 The inner workings of several popular multiprogramming operating systems are compared. Topics include processor scheduling, device management, memory management, and parallel processing.
Prerequisite: CSCI 263.
Class Level Restriction: Junior and Senior only.
- CSCI 333 Computer Networking 3.0 SH []**
 Introduction to Local Area and Wide Area computer networks. Topics include network topologies, ISO protocols, Ethernet, TCP/IP, and network support for distributed computing. The course emphasizes the science of networking (as opposed to network administration).
Prerequisite: CSCI 171 or CSCI 181.
Class Level Restriction: Junior and Senior only.
- CSCI 340 Advanced Algorithms 4.0 SH []**
 Survey of algorithms, with an emphasis on the application of algorithmic theory to the solution of practical problems. Categories include algorithm taxonomy, greedy algorithms, dynamic programming, divide-and-conquer, and intelligent search. Various specific algorithms exemplifying these categories are drawn from a variety of application areas such as compression, encryption, graph problems, sorting, computational geometry, and string matching.
Prerequisite: CSCI 240.
Class Level Restriction: Junior and Senior only.
- CSCI 380 Compilers 4.0 SH []**
 Concepts necessary for designing and developing a compiler. Topics include lexical analysis, parsing, semantic analysis, symbol table management, and code generation. Students will implement a small compiler as a project.
Prerequisite: CSCI 240 and CSCI 263.
Class Level Restriction: Junior and Senior only.
- CSCI 390 Topics in Computer Science 1.0-5.0 SH []**
 Topics will vary from year to year based on the needs and interests of students and instructor. All offerings will involve in-depth study of a specific topic, software design, the construction of working software, and self-instruction in addition to standard instruction. May be taken more than once if topics are different.
Prerequisite: CSCI 240.
Class Level Restriction: Junior and Senior only.
- CSCI 410 Capstone Proposal 1.0 SH []**
 Students research and prepare a capstone proposal in preparation for completing a computer science capstone project. The proposal must be approved by the computer science faculty prior to taking CSCI 415.
Class Level Restriction: Junior and Senior only.

CSCI 415 Capstone 3.0 SH []

A student-designed project with a significant programming component which pulls together the student's major. Choices include independents, internships, or group projects.

Prerequisite: CSCI 410.

Class Level Restriction: Junior and Senior only.

CSCI 421 Computer Issues Seminar 3.0 SH []

An examination and discussion of pressing computer issues facing society. Topics include personal impact, societal impact, artificial intelligence, privacy, and ethics. Majors from other disciplines are encouraged to take this course if they have taken any other computer science course.

Class Level Restriction: Senior only.

Dance (DANC)**DANC 030 Dance Composition - No Credit 0.0 SH []**

A course designed to introduce the student to the fine art of composition for dance. Respected texts are used to guide the students through the process of creating work for the stage. Students identify key components of effective composition, practice these principles, and produce pieces that illustrate their skill as choreographers. For non-dance minors whose academic load exceeds 18 hours.

Class Level Restriction: Sophomore and Junior and Senior only.

DANC 043 Dance: Ballet I 0.0 SH [GEPE]

Introduction to the basic principles and vocabulary of ballet. Flexibility, strength, and control are emphasized.

DANC 044 Dance: Ballet II 0.0 SH [GEPE]

Provides the intermediate dancer with ongoing training in ballet technique. Emphasis is on center work and adagio.

DANC 045 Dance: Ballet III 0.0 SH [GEPE]

Provides the more advanced dancer with an upper-level technique class emphasizing pointe work and petit allegro.

DANC 048 Dance: Jazz I 0.0 SH [GEPE]

Introduction to the basic principles and vocabulary of jazz technique and rhythm.

DANC 080 Dance: Modern I 0.0 SH [GEPE]

Introduction to the basic principles and vocabulary of modern dance. Emphasis is on individual expression through the use of improvisation, modern dance technique, and rhythm.

DANC 081 Dance: Modern II 0.0 SH [GEPE]

Builds on the basic modern dance techniques and allows greater exploration of improvisation and movement sequences.

DANC 082 Dance: Modern III 0.0 SH [GEPE]

Continuation of DANC 081. Further development of modern technique and improvisation and floorwork. Exploration of different styles of modern dance, e.g. Limón, Graham, and others.

DANC 083 Dance as Movement 0.0 SH [GEPE]

This introductory course is provided to train the student dancer in spatial awareness, weight transfer, and basic studio-dance movement. It is a generic dance class designed to enable dancers to make connections between basic pedestrian movement and dance vocabulary movements.

DANC 200 Topics in Dance History 3.0 SH [GEA]

A comprehensive study of a notable topic in dance history whether it is a choreographer, particular period of dance, or specific topic, e.g., Politics and Dance, Antony Tudor. Students will be introduced to a particularly relevant viewpoint that includes historical context, analysis, and viewing. The title will be extended to describe the current topic. May be taken more than once if topics differ.

DANC 250 Dance History 3.0 SH [GEA]

An introduction to western dance history. Periods covered include, but are not limited to, the Baroque, Romantic, and Classical ballet eras and the Modern and Post Modern eras. Both ballet and modern dance luminaries are studied. Video is used and an emphasis is placed on historical context as regards dance styles and periods.

DANC 330 Dance Composition 3.0 SH []

A course designed to introduce the student to the fine art of composition for dance. Respected texts are used to guide the students through the process of creating work for the stage. Students identify key components of effective composition, practice these principles, and produce pieces that illustrate their skill as choreographers.

Class Level Restriction: Sophomore and Junior and Senior only.

DANC 335 Creative Theory and Practice 1.0-3.0 SH []

This course serves as a laboratory for the performing artist (theatre and/or dance) to solidify his/her own artistic practice and process, to analyze and evaluate best practices in their discipline, and to articulate the transformative power of the performing arts within a community.

Prerequisite: A minimum of two dance technique classes and DANC 370 or THEA 101.

DANC 370 Dance Practicum Cast 1.0-3.0 SH []

Practical application in a dance production of classroom courses in a performance setting. Students participate in all aspects of a performance experience from auditions to learning and creating (if chosen as a choreographer) choreography, through the rehearsal process to the final mainstage performances for the community. May be offered for variable credit from one to three semester hours. May be taken more than once.

DANC 371 Dance Practicum Staff 1.0-3.0 SH []

A dance production course designed to give students hands-on experience in assisting the director and, in certain cases, the technical director. Professionalism, self-discipline, strong communication skills, and team work are stressed. May be offered for variable credit from one to three semester hours. May be taken more than once.

DANC 372 Choreography Practicum 1.0-2.0 SH []

This is a production course designed to enrich and strengthen the student choreographer's skills through participation in a faculty-directed but student-centric, main stage dance production. Choreographic staff will fully explore the performance process from the initial auditions through the public performances. Professionalism, self-discipline, team work, generosity of spirit, and personal creativity will all be stressed.

Prerequisite: DANC 330.

Class Level Restriction: Sophomore and Junior and Senior only.

Earth Science (ERTH)

ERTH 050 Service Learning in Earth Sci 0.0 SH []

Students volunteer in some capacity to assist in educational outreach in earth science and/or environmental studies or in research as a technician. Projects may serve Principia or other communities or outside agencies.

ERTH 111 Introductory Geology 4.0 SH [GESL]

This course studies the internal and external processes that form and shape the Earth and interprets the resulting landforms. Internal processes include tectonic plate movement, volcanoes, earthquakes, and mountain building. External processes include weathering, erosion, streams, wind, ocean currents, and glaciers. Labs cover mineral and rock identification, topographic, and geologic map reading. Field trips reinforce class material.

Class Level Restriction: Freshman and Sophomore only.

- ERTH 170 Earth Science** 4.0 SH [GESL]
Covers earth science topics that will explore the relationship between the earth's systems and human activities within a region. Topics include the Earth's physical processes (terrestrial and/or oceanographic), tectonic history and mineral and water resources. Title extended to describe region and/or topic. May be taken up to three times provided topics differ. Offered on Principia abroads or field programs only.
- ERTH 205 Introduction to Oceanography** 4.0 SH [GESL]
An introductory survey of oceanography as an interdisciplinary marine science. Topics include geological features and structures of ocean basins; the chemistry of sea water; heat, circulation, the carbon cycle, and air-sea interactions as they relate to climate; and biology processes in the sea.
- ERTH 225 Environmental Geology** 3.0 SH [GESN]
Geology from the perspective of the interrelationship of humanity and the Earth and the value of understanding the Earth in land use planning. Topics include geologic hazards, such as earthquakes, volcanoes, landslides, coastal erosion; water supply and contamination issues; waste management; hazardous geologic materials; mineral and energy resource issues; and global changes.
- ERTH 230 Nonrenewable Resources** 3.0 SH [GESN]
Survey of Earth's nonrenewable energy and material, as well as water resources - their occurrence in or on the Earth's crust, how they are extracted, processed, and used, and the impacts of these steps on the environment.
- ERTH 242 Historical Geology** 4.0 SH [GESL]
The geologic history of the Earth and the evolution of life through the study of fossils. Includes the movement of tectonic plates, shaping of continents, and formation of mountains, all interpreted from the study of rock and fossil records. Labs include rock and fossil identification, physical and biostratigraphic correlation of rock units, and interpretation of local geologic history.
- ERTH 280 Earth Sci Field Investigations** 1.0-4.0 SH []
Field investigation and related lab work for a special earth science project. Involves library and/or field research and reporting of scientific findings. Offered on demand. The title will be extended to describe the current topic. May be repeated up to a maximum of 12 SH provided topics or depth of research differ.
Prerequisite: EARTH 111 or EARTH 205.
- ERTH 301 Environmental Mapping & GIS** 4.0 SH []
Introduction to the concepts, techniques, and applications of mapping and monitoring the environment. Students become familiar with the uses of topographic maps, aerial photography, satellite imagery, Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Students design and implement an ecosystem mapping project.
Prerequisite: at least one earth science or 200-level field biology course.
Class Level Restriction: Junior and Senior only.
- ERTH 401 Senior Thesis** 1.0-6.0 SH []
Project selected in accordance with student's qualifications, interests, and needs. Project may be a component of an internship. May be offered for variable credit from one to six semester hours. May be taken three times up to a total of six semester hours.
- ERTH 410 Senior Readings** 3.0 SH []
This course introduces students to seminal pieces of environmental literature and to cutting edge thinking on environmental problems. It challenges students to define and defend their personal values with regard to the environment and to become active citizens in the environmental issues facing society.
Prerequisite: four EARTH courses.
Class Level Restriction: Junior and Senior only.

Economics (ECON)

ECON 203 Principles of Microeconomics 3.0 SH []

An introduction to economics with special emphasis on microeconomic concepts. These focus on decision-making by individuals and organizations such as firms, government departments, and supranational organizations. Students develop economic perspectives on a wide variety of topics; examples include the minimum wage, environmental legislation, Social Welfare policy, and entrepreneurship. First course in the economics and in the business administration majors' sequence.

ECON 204 Principles of Macroeconomics 3.0 SH []

Continues the study of economic theory and analysis begun in ECON 203. Major topics include aggregate demand and supply, money, employment, economic growth, monetary and fiscal stabilization policy, national income and product accounts, inflation, and international economics. The assumptions of Keynesian, neoclassical, monetarist, and "supply-side" programs are also explored.

Prerequisite: ECON 203.

ECON 231 Comparative Economic Systems 3.0 SH [GESS]

Examines resource allocation systems of various nations; stresses comparison of free market, social democratic, market socialist, and centrally planned economies.

ECON 271 Environmental Economics 3.0 SH []

This course provides an economic perspective on natural resource and environmental issues. Topics such as sustainability, pollution, allocation of non-renewable resources, ecosystem management, and global climate change are examined using two different approaches: traditional economic theory; and ecological economics, which considers economic activity in the context of the biological and physical systems in which it occurs.

Prerequisite: ECON 203.

Class Level Restriction: Sophomore and Junior and Senior only.

ECON 303 Intermed Microeconomic Theory 3.0 SH []

Builds on principles studied in ECON 203. Emphasis is on understanding the primary economic determinants of a firm's profitability: the elasticity of its demand curve, its cost structure, and the structure of the industry/market the firm is in. Students will develop their understanding of these concepts through individual and team research on real companies and through guest lectures.

Prerequisite: ECON 203 and ECON 204.

Class Level Restriction: Junior and Senior only.

ECON 304 Intermed Macroeconomic Theory 3.0 SH []

Builds on the principles studied in ECON 204. Focus is on the use of the long-run Classical and short-run fixed price analyses to explore the alternative policy options available to government in its attempts to promote economic welfare.

Prerequisite: ECON 203 and ECON 204.

Class Level Restriction: Junior and Senior only.

ECON 313 Introduction to Econometrics 3.0 SH []

This course covers the statistical tools needed to understand empirical economic research and to plan and execute independent research projects. Topics include statistical inference, regression, generalized least squares, instrumental variables, simultaneous equations models, and evaluation of government policies and programs.

Prerequisite: BUAD 161.

Class Level Restriction: Junior and Senior only.

ECON 316 Economic Development 3.0 SH []

This course focuses on the economic factors and processes that can contribute to economic growth and development. Topics covered include: the role of population growth, free markets vs. market controls, the role of education, sources of capital for development (domestic saving vs. foreign investment) and the impact of government economic policies (fiscal, monetary, and trade).

Prerequisite: ECON 203.

Class Level Restriction: Junior and Senior only.

ECON 321 Money and Banking 3.0 SH []

Principles of money and the monetary system; commercial bank and thrift operations; central banking and monetary management.

Prerequisite: ECON 203 and ECON 204.

Class Level Restriction: Junior and Senior only.

ECON 325 Economics of Land and the City 3.0 SH []

Considers the relationship between the economy, land, and property. The course includes a particular focus on the city, including a case study of St. Louis. Students will learn how land relates to the economy as the site for economic activity and as an economic asset, as well as how urban areas change and evolve as a result of economic transformation.

Class Level Restriction: Junior and Senior only.

ECON 331 International Economics 3.0 SH []

Studies the influence on economic activity of free international trade, tariffs, trade blocs, exchange rate systems, and immigration policies. Examines international institutions such as cartels, multinational corporations, and common market systems.

Prerequisite: ECON 203.

Class Level Restriction: Junior and Senior only.

ECON 431 Evolution of Economic Thought 3.0 SH []

Historical development of economic thought from its origins to the present. Open only to economics majors.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Economics Majors only.

Educational Studies (EDST)**EDST 101 Pathways to Success 3.0 SH []**

This course gives students a foundation for lifelong learning and helps them to succeed in college and beyond. Focus will be on communication, professionalism, study skills, 21st-century skills, creativity, presentation skills, time and distraction management, collaboration, critical reading and thinking skills, note taking, and effective study techniques.

EDST 120 Signs of the Times 3.0 SH [GESS]

A liberal arts foundations course centered around a contemporary national and world issue. Using a cross-curricular approach to analysis and problem solving, students critically read current and classic material, write extensively, discuss actively, and work collaboratively with other members of the class. Students also explore the attitudes, skills, and behaviors that contribute to success in a changeable college experience. The contemporary issue that the class focuses on could change from year to year, but the purpose and process will remain the same. The title will be extended to describe the current issue. This course is designed to encourage a successful transition to the breadth and depth of college learning and living at Principia.

EDST 130 Outdoor Education 3.0 SH [GESS]

This course is designed to give students in-depth exposure to a wide variety of skills applicable to the outdoor educator. Students gain a strong foundation in group facilitation, team building, leadership, group processing, debriefing, diversity, and Leave No Trace outdoor ethics. Hands-on skills include knot tying, fire building, camping, and ropes course work.

Class Level Restriction: Freshman and Sophomore only

Fee=\$50.00.

EDST 170 Environmental Education 3.0 SH []

This course integrates ecological concepts with theories about teaching and learning. Students gain practical experience designing and delivering creative hands-on learning units. Students learn how to adapt these lessons and methods to a variety of different age groups, settings, and outcomes. Course material focuses on constructivist teaching methods, eco literacy, and "green" teaching.

Fee=\$50.00.

- EDST 183 Adolescence and Society** **3.0 SH** **[GESS]**
 Human growth and development of middle through high school age children, emphasizing the perceptions of adolescents in wider societal contexts such as government, corporate culture, literature, mass media, and cultural traditions. Includes researching and evaluating definitions of adolescence from a variety of perspectives given by the humanities and social sciences. Individual research projects include a focus on adolescent literature.
- EDST 184 Children and Society** **3.0 SH** **[GESS]**
 Human growth and development from birth through late elementary-aged children, emphasizing the perceptions of children in wider societal contexts such as government, corporate culture, literature, theatre, mass media, and cultural traditions. Includes researching and evaluating definitions of childhood from a variety of perspectives given by the humanities, arts, and social sciences. Individual research projects include a focus on children's literature and the direct observation of children's behavior.
- EDST 210 21st Century Learning** **3.0 SH** **[GESS]**
 Introduces students to 21st century skills and concepts that have been identified as key to successful and effective global citizenship. These include innovation, creativity, critical thinking, and technological proficiency. Experiential and discussion-based classwork will engage students in an ongoing conversation about the educational reform movement as a response to the call to prepare for the demands of the future.
- EDST 218 Education in America** **3.0 SH** **[]**
 An exploration of American education through historical, philosophical, and political lenses. Students will be exposed to a variety of readings which will develop their understanding of the past, present, and future of education in America.
- EDST 222 Field Experiences in Education** **2.0 SH** **[]**
 Students gain firsthand experiences in public, private, and alternative schools. Course will include extensive and frequent field trips to observe a variety of educators implement classroom methods and management strategies. They will also observe and reflect upon the influence of race, gender, and socioeconomic differences in the classroom.
Prerequisite: EDST 260.
Corequisite: EDST 223, EDST 251, EDST 253, EDST 254, EDST 325.
Fee=\$150.00.
- EDST 223 Classroom Methods & Management** **3.0 SH** **[]**
 This course will provide students with a strong foundation in best practices in education which are rooted in educational theory and cultural awareness. This includes methods of unit and lesson design, classroom management approaches, development of learning environments, and pedagogical strategies.
Prerequisite: EDST 260.
Corequisite: EDST 222, EDST 251, EDST 253, EDST 254, EDST 325.
- EDST 235 Outdoor Leadership** **2.0-4.0 SH** **[]**
 Exploration of outdoor education in an experiential and hands-on way with an emphasis on the application of its related theories, skills, and methods. Emphasis will be on experiential, environmental, and adventure education. Core competencies of outdoor leadership will include facilitation skills, technical skills, decision-making skills, teambuilding, self awareness, safety and risk management, diversity mindfulness, and environmental stewardship. Offered on Principia abroad or field programs only. May be offered for variable credit from 2-4 semester hours. The title will be extended to reflect the specific country, region, or focus topic.
- EDST 240 Contemporary Topics** **3.0 SH** **[]**
 An exploration of a contemporary topic or issue in education. Examples of topics include design thinking, creativity and innovation, project-based learning, differentiation and inclusion, grit, instructional design, coaching, and adult education. Students will develop critical and reflective thinking skills, effective communication, and pedagogical knowledge. Title will be extended to describe the topic. May be taken more than once if the topics differ.

EDST 242 Outdoor Ed Topics 3.0 SH []

This course may focus on interpretive studies, leadership, leisure and recreation, hard skills, country-specific themes, adventure theory, or other current and evolving topics in the field of outdoor education. Coursework will require students to demonstrate critical and reflective thinking, effective oral and written communication skills, and pedagogical knowledge. Title will be extended to describe the topic. May be taken more than once if the topics differ.

EDST 251 Educational Theory 3.0 SH []

Addresses critical questions related to teaching and learning: What is learning? How do people learn? How do I learn best and how does that inform my practice? Through an exploration of selected educational theorists, students will explore and question their own beliefs about teaching and learning. These theories are evaluated through the lenses of cultural, racial, socioeconomic, and gender differences.

Prerequisite: EDST 260.

Corequisite: EDST 222, EDST 223, EDST 253, EDST 254, EDST 325.

EDST 253 Dynamic Learning Communities 2.0 SH []

Students will research and practice communication, collaboration, and professionalism in the context of learning communities. Students will participate in complex dialogs, group interactions, decision making, and visioning. These skills will be applied to individual and group learning needs, and the design of safe and inviting learning environments. Awareness and appreciation of diversity and multiple perspectives will be included.

Prerequisite: EDST 260.

Corequisite: EDST 222, EDST 223, EDST 251, EDST 254, EDST 325.

EDST 254 Child & Adolescent Development 3.0 SH []

Study of the development of children from childhood to adolescence in diverse school contexts. Study is grounded in related development theory and school issues related to physical, social, and cognitive development. Applicable Illinois standards for middle school teachers are addressed.

Prerequisite: EDST 260.

Corequisite: EDST 222, EDST 223, EDST 251, EDST 253, EDST 325.

EDST 260 Communication 3.0 SH [GESS]

Introduces study of oral communication in large and small groups. Techniques and theories of oral communication, as well as interaction with readings, process activities, and dialogue with communication professionals form the course content. Verbal and nonverbal communication skills are developed through practiced large and small group interactions. Emphasis is given to learning about communication in a variety of social contexts, as well as cultural and ethnic awareness in communication.

EDST 275 Pedagogy of Place 3.0 SH [GESS]

Place-based education uses the community, cultural heritage, environment, landscapes, geography, economics, sustainability, and current issues to immerse students in authentic experiences that foster connections between the environmental and human forces that shape a region. This interdisciplinary approach builds ecological and cultural literacy. Title will be extended to describe the current topic. May be repeated once provided the topics differ.

EDST 277 Tutor Training Seminar 1.0 SH []

This course provides practical and theoretical instruction for student peer tutors and teaching assistants across the disciplines. Recommended for students planning to be tutors, TAs, and those hoping to be Principia post-graduate teaching interns. Communication skills, lesson planning, and developing a teaching philosophy are among topics covered. This course is not a substitute for WRIT 350 Teaching the Writing Process.

EDST 278 Child & Adolescent Literature 3.0 SH [GESS]

An introductory study of literature for children and adolescents emphasizing ethnically and culturally diverse authors and their literature. Students will discuss and critique themes and issues found in children's literature using plot, setting, characterization, and the other literary elements as rich criteria for literary analysis.

- EDST 285 Foundations in Experiential Ed** 3.0 SH []
 Provides a framework for understanding the history, theories, philosophies, current trends, best practices, and pedagogical approaches in experiential and outdoor education. Students will explore the connections between experience, knowledge, and learning processes. Research methods, scholarly works, and sub-categories such as service learning, cooperative learning, and project-based learning will be studied in relation to this topic.
- EDST 287 Character Education** 3.0 SH [GESS]
 Exploration of philosophical and practical theory and issues about character growth focused by approaches to character education at The Principia. What is character education in today's contemporary culture? Special historical, social, political, religious emphasis, based on Mary Kimball Morgan's writings, as well as a wide array of readings on related moral theorists.
- EDST 295 Wilderness Literacy** 3.0 SH []
 Outdoor educators have many opportunities to facilitate the exploration of wilderness through discussions, readings, and field experiences. Methods associated with teaching and learning about attitudes and beliefs regarding wilderness will be modeled and taught through the study of writers, philosophers, poets, and their relationship to the Wilderness Act, land conservation, and the establishment of the National Park System.
Class Level Restriction: Sophomore and Junior and Senior only.
- EDST 300 Exper. Educ Practicum/Intern** 3.0 SH []
 Students will creatively demonstrate a mature understanding of experiential teaching and learning by designing original curriculum in the form of an expedition, course, or program. The design may include budget considerations, safety precautions, lesson plans, equipment and staffing needs, risk management considerations, identification and application of learning theory and best practices, and a personal philosophy of experiential teaching and learning.
Prerequisite: EDST 130 and EDST 285.
Class Level Restriction: Junior and Senior only.
- EDST 303 Educational Psychology** 3.0 SH []
 Application of general principles of psychology to educational settings. Theories of teaching and learning and the study of curriculum in a critical, historical, and social context are included. Consideration of such educational issues as race, class, gender, methodology, research, evaluation, assessment, management, and learning processes are also examined.
Class Level Restriction: Junior and Senior only.
- EDST 305 Community Education** 3.0 SH []
 Education at community-focused organizations such as zoos, museums, science centers, libraries, performance centers, and state and national parks will be explored with an emphasis on experiential learning and the goal of developing life-long learners and engaged citizens. Content will include career readiness, social justice, early-childhood, interpretative studies, literacy, homeschooling, innovation, creativity, technology, place-based education, and service learning.
Prerequisite: EDST 260.
Class Level Restriction: Junior and Senior only.
- EDST 310 Global Education** 3.0 SH []
 Explores historical and contemporary issues in educational systems around the world. Course will examine international education through political, social, and cultural lenses. Students will compare and evaluate the progress of education on a global scale.
Class Level Restriction: Junior and Senior only.
- EDST 312 Authentic Leadership** 3.0 SH []
 This course focuses on learning about leadership styles, the development of leadership skills, and the cultivation of character traits and dispositions applicable to managing and working with others in multiple contexts. Development of a personal and authentic leadership style will be an emphasis. This course is ideal for those interested in teaching, coaching, mentoring, administration, and management.
Prerequisite: EDST 260.
Class Level Restriction: Junior and Senior only.

- EDST 314 Leadership Communication Seminar** 2.0 SH []
 This student-centered investigation and practice of advanced communication methods and skills is applicable to leadership roles in areas such as education, business, and athletics.
Prerequisite: EDST 260 and EDST 312.
Class Level Restriction: Junior and Senior only.
- EDST 325 Literacy Across the Curriculum** 3.0 SH []
 Reading and writing instruction and methods in the context of all content areas. Includes a study of what literacy is, how it occurs, and different philosophies of how it can be taught. This course uses a student-centered approach where students examine their own experiences in literacy training and their own literacy traits.
Prerequisite: EDST 260.
Corequisite: EDST 222, EDST 223, EDST 251, EDST 253, EDST 254.
- EDST 330 Math for Elem/Mid Sch Teachers** 3.0 SH []
 This course focuses on understanding mathematical thinking and best current practices through experiencing math. Considers methodology, materials, integration with total curriculum. Special attention given to differentiated instruction and culturally responsive teaching.
Prerequisite: EDST 223.
Class Level Restriction: Junior and Senior only.
- EDST 342 Science Methods for Teachers** 3.0 SH []
 Through a constructivist approach, students will learn educational theory and methodology appropriate for STEM classrooms. Science content will be explored with an emphasis on inquiry-based teaching and learning and best practices in assessment. Special attention is given to differentiating science instruction to meet the needs of diverse learners and to make science accessible to everyone.
Prerequisite: EDST 223.
Class Level Restriction: Junior and Senior only.
- EDST 352 Inclusive Learning Environment** 2.0 SH []
 Content will include instructional theory and methodology focused on establishing learning environments that include and embrace all students. Strategies for curriculum, instruction, and management modifications for all learning styles and needs will provide future educators with the foundation they need in order to structure learning environments where all students will be valued and find success.
Prerequisite: EDST 260 and EDST 330.
Class Level Restriction: Junior and Senior only.
- EDST 383 Adolescent Development** 3.0 SH []
 Human growth and development of children of middle through high school age, emphasizing the impact of wider societal contexts on social, moral, intellectual, and language development. Includes researching and evaluating definitions of adolescence from a variety of social science perspectives including the perspective of educational theory. Examines how adolescence is a component in contemporary school and society issues.
Class Level Restriction: Junior and Senior only.
- EDST 388 Philosophy of Education** 3.0 SH []
 Study of classic and contemporary philosophies of education. A beginning, personal philosophy of education is produced.
Class Level Restriction: Junior and Senior only.
- EDST 420 Capstone: Educational Studies** 2.0-3.0 SH []
 Students will independently design and present a project that includes application of theory and reflects their interest area in education. Projects may be portfolios, case studies, research projects, or field work. Proposals must be approved and supervised by the Education department faculty. May be offered for variable credit from two to three semester hours.
Prerequisite: EDST 260.
Class Level Restriction: Junior and Senior only.

Engineering Science (ENGR)

ENGR 040 Fund of Engineering Exam Prep 3.0 SH []

This course prepares the students for The Fundamentals of Engineering Exam by providing them with the techniques and strategies of taking the FE exam, and reviewing core topics and focus areas of the exam. A practice test similar to the actual exam in terms of duration and content is offered to the students.

Class Level Restriction: Senior only

Field of Study Restrictions: Engineering Science Majors only.

ENGR 060 Engineering Seminar Non-Credit 0.0 SH []

Non-credit version of ENGR 260. The title will be extended to describe the current topic.

ENGR 101 Graphical Communications 3.0 SH []

This is a course in graphical communication, expression, and interpretation applicable to engineering, sciences, and other technology fields of study. The ability to visualize in three dimensions is developed through shape description, sketching, and multi-view projection exercises. The course includes, but is not limited to, the engineering and architectural scales, engineering lettering, geometric constructions, use of instruments, and dimensioning.

ENGR 160 Intro Engineering Profession 2.0 SH []

Exploration of engineering, including fields of engineering; expectations of engineering schools; and engineering topics such as time management, project management, CAD design, modeling, computing, fabrication, and ethical issues.

Class Level Restriction: Freshman and Sophomore only.

ENGR 170 History of Technology 3.0 SH []

History of technology, including the intellectual and economic process of technological innovation, elements contributing to technological progress, the impact of such progress on the human experience, and the application of tech history to evaluating and extrapolating current trends in engineering and technology.

ENGR 180 Project Management 3.0 SH []

A hands-on course for learning the basic principles of planning, implementing, and managing a project. Students will participate as team members in a community-based project and will analyze the project, integrating what they are learning with their personal experience. The course will emphasize problem solving, effective communication, ethics, and citizenship.

ENGR 201 Engineering Mechanics:Statics 3.0 SH []

This course is to introduce students to some fundamental principles of the mechanics and their applications to problems of engineering. It is also geared towards helping students to thoroughly understand the presentation of the theory and its application to all disciplines of engineering as one decides to choose (civil, mechanical, electrical, computer, etc.) and stimulate an interest in engineering.

Prerequisite: MATH 182 (may be taken concurrently) and PHYS 201.

ENGR 202 Engineering Mechanics:Dynamics 3.0 SH []

This course is an application of the fundamental concepts of mechanics, including resultants of force systems, free-body diagrams, equilibrium of rigid bodies, and analyses of structures as studied in ENGR 201.

Prerequisite: PHYS 201, MATH 182, and ENGR 201.

ENGR 203 Mechanics of Materials 3.0 SH []

This course is the branch of mechanics that deals with the relationship between external loads and reactions and the intensities of the internal loads within a deformable body. For the design of a structure or verification of the safety of an existing structure, it is necessary to determine the forces acting on and within the structural members.

Prerequisite: ENGR 201 and MATH 380 (may be taken concurrently) with a grade of C- or better in both courses.

- ENGR 204 Mech. Engr. Student Design 3.0 SH []**
 This course familiarizes students with the operation and safety of machine tools. This gives students knowledge of what goes into engineering designs in building a prototype and also enables them to operate shop machinery as a part of future courses.
- ENGR 205 Chem Engineering Fundamentals 3.0 SH []**
 Introduction to principles of stoichiometry using material and energy balances within chemical processes.
Prerequisite: CHEM 131.
- ENGR 206 Elect. Engr. Circuit Analysis 4.0 SH []**
 This lab course introduces fundamental circuit analysis for EE or other engineering majors. Topics include Ohm's Law, KCL, KVL, mesh and node-based circuit analysis, op amps, RLC circuits, sinusoidal analysis and phasors, and three-phase power. Emphasis on intuitive circuit comprehension using equivalences, superposition, etc. Lab activities emphasize both simulated and physical circuits.
Prerequisite: MATH 181 with a grade of C- or better.
- ENGR 242 3-D Printing Technology 4.0 SH [GESL]**
 This course provides an overview of open-source hardware in theory and practice introducing the Maker movement and 3-D printing. Each student builds a custom 3D printer and designs objects for printing using a variety of open-source software design programs. The body of the course involves using the 3D printer and design software for a progressive series of projects.
Class Level Restriction: Junior and Senior only
Fee=\$100.00.
- ENGR 260 Engineering Seminar 1.0 SH []**
 Topics will vary based on the needs and interests of the students and instructor, and the title will be extended to describe the current topic. May be taken eight times up to a total of eight semester hours provided the topics differ.
Prerequisite: ENGR 160.
- ENGR 262 Computer Hardware Architecture 5.0 SH []**
 Digital electronic logic explored in theory and laboratory from simple switching to electronic architecture of digital computers. Topics include electronic valving and switching, logic-gate design, Boolean algebraic proofs of gate equivalence, counters, registers, arithmetic, operations, memory addressing and information transfer, microprogramming, interfacing and control.
Prerequisite: MATH 261.
- ENGR 264 Embedded Systems 4.0 SH []**
 Design and construction of embedded software and hardware, including device drivers, I/O bus protocols, digital card design, and low-level debugging.
Prerequisite: CSCI 263 and ENGR 262.
- ENGR 279 Engineering Project Proposal 1.0 SH []**
 Students research and prepare an engineering project proposal in preparation for ENGR 280. The proposal must be approved by engineering science faculty prior to taking ENGR 280. May be taken four times up to a total of four semester hours provided the projects differ.
Prerequisite: ENGR 180.
- ENGR 280 Engineering Projects 1.0-6.0 SH []**
 A hands-on course that allows students to learn vital lessons through active participation in a project. Topics may vary between offerings and are chosen according to needs and interests of students and instructor. The title will be extended to describe the current topic. May be offered for variable credit from one to six semester hours. May be taken eight times up to a total of 48 semester hours regardless of the topic.

- ENGL 178 Renaissance Themes** **3.0 SH** **[GEH]**
 This course explores the major themes of Renaissance thought. It includes readings from both Italian and English Renaissance writers.
Class Level Restriction: Freshman and Sophomore only.
- ENGL 202 Understanding Poetry** **3.0 SH** **[GEH]**
 Gives students an overview of poetic form and introduces students to a variety of reading strategies when approaching poetry. May focus this study on the work of three to five major poets.
- ENGL 204 Understanding Short Fiction** **3.0 SH** **[GEH]**
 Selections from several major short fiction writers from a range of historical periods and cultural backgrounds, designed to equip students with a variety of critical reading strategies.
- ENGL 220 Environmental Literature** **3.0 SH** **[GEH]**
 This course focuses on the ways in which the environment has been portrayed in English language literature and the relationship between that portrayal and treatment of the environment. The course may focus either chronologically or regionally. Students are also introduced to theories of environmental aesthetics and their ethics.
- ENGL 232 The Gothic Novel** **3.0 SH** **[GEH]**
 The study of a specific kind of literature which began to flourish in the middle decade of the eighteenth century and which remains with us today in horror films and novels. The course traces the development of this literature, mainly in the form of the novel, from its beginnings in sentimentality and basic conventions, through romanticism and the addition of psychological elements, to modern existential and sociological themes.
- ENGL 234 The Language of Film** **3.0 SH** **[GEH]**
 The course serves to acquaint students with basic film theory and terminology as tools for the analysis of film as a type of text.
- ENGL 238 Orality and Literacy** **3.0 SH** **[GEH]**
 Orality and Literacy explores the way in which "literature" is created, transmitted, and retained. For most of human history, people have been largely illiterate, yet that has not prevented the creation of stories, tales, myths, and legends. Student will gain a greater awareness of how the different paradigms of oral performance/composition and written texts influence literary art.
Class Level Restriction: Sophomore and Junior and Senior only.
- ENGL 239 Intro to Creative Nonfiction** **3.0 SH** **[GEA]**
 An introduction to the art and craft of creative nonfiction. Students study the elements of creative nonfiction and apply that study to their own creative writing. Students read published essayists and write multiple creative nonfiction essays themselves, including essays of place, portraits, and memoir.
- ENGL 240 Poetry Writing I** **3.0 SH** **[GEA]**
 An introduction to the art and craft of poetry writing. Students study formal poetics and apply that study to their own creative writing. A substantial portion of the course is devoted to writers' workshop in which students read and critique each other's poetry. Students also read and write about the work of important contemporary poets in order to discover and understand the ways in which these writers apply formal poetics in their work.
- ENGL 241 Fiction Writing I** **3.0 SH** **[GEA]**
 An introduction to the art and craft of fiction writing. Students study the elements of short fiction and apply that study to their own creative writing. A substantial portion of the course is devoted to writers' workshop in which students read and critique each other's short stories. Students also read and write about the work of important contemporary fiction writers in order to discover and understand the ways in which these writers use such elements as pacing, structure, voice, dialogue, character, and scene in their work.

- ENGL 242 Theory as Creative Practice** **3.0 SH** **[GEH]**
 This class explores the links between critical theory and creative practice in contemporary literature and visual culture. Regarding critical theory as a creative practice, students investigate the ways in which writers and artists pose creative problems, solve them by developing working methods based on ideas, and cultivate distinct voices through inventive and informed reformulation of extant practices and theoretical models.
- ENGL 243 Theory as Practice on Location** **3.0 SH** **[GEH]**
 This class explores the links between critical theory, creative practice, and cultural context. The location in which the course is taught determines its focus and usually includes interaction with working artists and writers. The title will be extended to describe the current location. May be taken more than once provided the locations differ. Offered only on Principia abroads and field programs.
- ENGL 253 Gender Studies in Literature** **3.0 SH** **[GEH]**
 Analyzes texts (which may include fiction, films, poetry, and essays) by authors from a range of cultural backgrounds that focus on and question the dominant gender roles of their time and place. These texts may span historical eras or focus on one particular period. Students examine the literature primarily through the lens of feminist and gender theories and historical context.
- ENGL 256 U.S. Literature to 1860** **3.0 SH** **[GEH]**
 A survey of European-American writers, including Puritans, Transcendentalists, and reactionary writers, as well as early slave narratives and traditional Native American texts in translation.
- ENGL 257 U.S. Literature 1860-1940** **3.0 SH** **[GEH]**
 An exploration of the rise of naturalism, realism, and modernism in U.S. literature from the end of the Civil War to the beginning of World War II.
- ENGL 258 U.S. Literature Since 1940** **3.0 SH** **[GEH]**
 Explores texts by a diverse range of authors vis-a-vis geography, ethnicity, religion, gender, and sexuality, focusing on the experimental nature of their writing, the questions they raise about U.S. identity and history, and the social and political concerns they address, including the Civil Rights and feminist movements, the Vietnam War, and the emergence of gay culture and identity.
- ENGL 260 Scottish Literature** **3.0 SH** **[GEH]**
 Introduces students to Scottish literature. The course emphasizes literature written in the 18th and 19th centuries, though literature before and after that period may also be addressed. Emphasis is placed on issues of Scotland's complex relationship with England and the English language.
- ENGL 262 Postcolonial Literature** **3.0 SH** **[GEH]**
 Explores literature and theory by writers from previously colonized countries. These texts may span a variety of geographic areas, such as the West Indies, South Asia, Africa, and Ireland, or may focus in depth on writers from one particular continent. Texts by white Europeans writing from the perspective of the colonizing power may be included as a basis for comparison.
- ENGL 263 Literature of Conflict** **3.0 SH** **[GEH]**
 A study of the literature of conflict, with emphasis on war literature and its related literature of dislocation, social disruption, and dissent.
- ENGL 264 Southern Literature** **3.0 SH** **[GEH]**
 A study of the literature of the southern United States with emphasis on both contemporary writers and such writers as James Dickey, Ralph Ellison, William Faulkner, Zora Neale Hurston, Harper Lee, Carson McCullers, Flannery O'Connor, Walker Percy, Eudora Welty, and Richard Wright.
- ENGL 265 Native American Literature** **3.0 SH** **[GEH]**
 This course centers on texts from the Native American Renaissance in the 1960s to the present, by writers such as N. Scott Momaday, Leslie Marmon Silko, Sherman Alexie, and Louise Erdrich. The class may also include some traditional Native American texts in translation, as well as examples of representations of Native Americans by European-American writers and filmmakers.

- ENGL 266 African American Literature 3.0 SH [GEH]**
This course examines African American texts (which may include fiction, poetry, essays, slave narratives, memoirs, speeches, or sermons). Various literary periods from colonial to contemporary times may be covered.
- ENGL 277 Shakespeare in England 6.0 SH [GEH]**
Taught as part of an abroad program, this course introduces students to the life and writings of William Shakespeare. Besides studying plays in a classroom setting, students attend productions at the Globe Theatre and the Royal Shakespeare Theatre. Students also undertake intensive research at the British Library and the Shakespeare Birthplace Trust regarding a single character from a Shakespearean play.
- ENGL 279 Shakespeare I 3.0 SH [GEH]**
This course offers an overview of Shakespeare's writings including both his poetry and his plays. The course is designed to help students gain confidence in reading Shakespeare's work and to understand it in the context of both his culture and our own.
- ENGL 282 17th & 18th Cent British Lit 3.0 SH [GEH]**
This course offers a survey of British literature from 1600 to the end of the long 18th century.
- ENGL 283 Romantic Literature 3.0 SH [GEH]**
Examines the important themes of the British Romantic period and their cultural contexts through the study of the works of poets and prose writers of the period.
- ENGL 284 Victorian Literature 3.0 SH [GEH]**
Explores texts of the period, focusing on questions of nationalism, colonialism, religion, gender roles, and sexual orientation, and emerging psychological and evolutionary theories, by considering how authors such as Brontë, Eliot, Dickens, and Wilde reflected the dominant ideologies of their day and called them into question.
- ENGL 285 Modern British Literature 3.0 SH [GEH]**
Fiction, poetry, and drama of the early 20th century, with emphasis on writers such as Yeats, Eliot, Conrad, Woolf, and Beckett.
- ENGL 286 History of British Drama 3.0 SH [GEH]**
This course examines British drama from the medieval period to the 21st century both as literature and as performance. This course is usually taught on an abroad program to England.
- ENGL 290 Poetry Writing II 3.0 SH []**
An intermediate-level poetry-writing seminar for students familiar with the formal elements and techniques of poetry writing. Emphasis is placed on beginning to cultivate distinct voices as writers, more advanced study of poetics, and research about poets and their creative processes. Students produce a number of original poems within the writer's workshop structure of the course.
Prerequisite: ENGL 240.
Class Level Restriction: Junior and Senior only.
- ENGL 291 Fiction Writing II 3.0 SH []**
An intermediate-level fiction-writing seminar for students familiar with the formal elements and techniques of fiction writing. Emphasis is placed on beginning to cultivate distinct voices as writers, more advanced study of narrative elements and structures, and research about fiction writers and their creative processes. Students produce a number of original short stories within the writer's workshop structure of the course.
Prerequisite: ENGL 241.
Class Level Restriction: Junior and Senior only.
- ENGL 315 Shakespeare II 3.0 SH []**
Examines Shakespeare's plays through either specific themes or critical approaches. Some familiarity with Shakespeare's works will be helpful as the course is not a survey course but instead delves deeply into a select number of plays.
Class Level Restriction: Junior and Senior only.

- ENGL 320 History of the British Novel** 3.0 SH []
 Novels selected from early and late periods trace development of this form.
Class Level Restriction: Junior and Senior only.
- ENGL 325 Film as Literature** 3.0 SH []
 The study of film as a text. Students read and apply film theory and literary criticism to the in-depth analysis of films as alternative narratives.
Prerequisite: ENGL 234 and one additional English literature or world literature course.
Class Level Restriction: Junior and Senior only.
- ENGL 330 Single Author** 3.0 SH []
 Examines the work of a single author. Analyzes the style of the author and introduces major biographical or critical approaches to the author. The title will be extended to describe the current topic. May be taken three times provided the authors studied differ.
Class Level Restriction: Junior and Senior only.
- ENGL 335 Contemporary Issues** 3.0 SH []
 An advanced seminar examining contemporary literature in the context of current critical debate. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- ENGL 345 Creative Writing on Location** 3.0 SH [GEA]
 Creative writing on location for students enrolled in an abroad, field program, or a course focused on site-specific writing. Coursework provides opportunities for in-depth individual research and creative work based upon the cultural and programmatic content of the abroad or field program, or course site. The title will be extended to describe the current location. May be taken more than once provided the locations differ.
- ENGL 351 Adv Creative Writing Seminar** 3.0 SH []
 An advanced creative writing seminar for poets, fiction writers, and creative nonfiction writers. The course is organized as a community of serious writers who are beginning to develop portfolios of coherent work, exploring and articulating their influences, and expanding their practical understanding of what it means to maintain a creative literary practice.
Prerequisite: one complete sequence in the creative writing series (ENGL 240 and ENGL 290) or (ENGL 241 and ENGL 291).
Class Level Restriction: Junior and Senior only.
- ENGL 353 Literary Editing** 3.0 SH []
 A workshop in which students learn the fundamental skills and methods of arts/literary editing and are introduced to the issues involved in editing a literary publication (either print or electronic).
Class Level Restriction: Junior and Senior only.
- ENGL 354 Literary Editing Practicum** 2.0 SH []
 Production staff for the annual online literary journal "Mistake House." Provides experiential training in various production positions, including copy editing, project management, editorial assistance, web site coordination, circulation and promotion, etc. May be repeated up to three times.
Prerequisite: ENGL 353.
- ENGL 358 Seminar** 3.0 SH []
 Centering upon a literary theme or form at the advanced level, this topics course is designed primarily for majors to engage in intense study or original research under the guidance of the professor. It is conducted with an emphasis on student-defined learning and incorporates sophisticated expectations for scholarship and scholarly writing. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- ENGL 388 Literature and Critical Theory** 3.0 SH []
 The application of various critical theories to literary texts.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: English, Foreign Languages, Theatre Majors only.

ENGL 399 Capstone Proposal 2.0-3.0 SH []

Prepares students for their capstones. Students research possible topics and write a formal proposal for their capstones. Usually taken the semester preceding the capstone but can be taken concurrently. May be offered for variable credit from two to three semester hours.

Prerequisite: ENGL 388 (may also be taken concurrently).

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: English Majors only.

ENGL 400 Capstone in Literature 3.0 SH []

Individual reading, research, and writing on a single literary issue or author culminating in an in-depth thesis essay. Required for the major.

Class Level Restriction: Junior and Senior only.

ENGL 401 Capstone in Creative Writing 3.0 SH []

This course is the culmination of the creative writing concentration in the English major. Students create a substantial and coherent body of original fiction or poetry, accompanied by an artist's statement. Students also read deeply the work of writers who have influenced them and conduct serious research about their work and working process. A public presentation - a reading or some other form of publication - at the completion of the capstone is encouraged.

Prerequisite: one complete sequence in the creative writing series (ENGL 240 and ENGL 290 or ENGL 241 and ENGL 291) and ENGL 351.

Class Level Restriction: Senior only

Field of Study Restrictions: English Majors only.

French (FREN)**FREN 104 Elementary French I 3.0 SH []**

In this first semester of the two-semester elementary sequence students learn from video, lab CD exercises, and classroom activity how to listen and speak, read and write French sentences. They describe themselves and others, and their present and future activities. They also begin work with the past tense and elements of French culture as they follow the video story.

FREN 105 Elementary French II 5.0 SH [GE2L]

In this second course of the two-semester elementary language sequence, students fulfill the general education second language requirement. They understand and speak, read, and write sentences and paragraphs in the present, future, and past tenses in order to function in everyday situations in French-speaking cultures they are beginning to learn about.

Prerequisite: FREN 104 or placement.

FREN 110 Elementary Review 3.0 SH [GE2L]

Intensive review of first year French with emphasis on normal conversational French and grammar correctness. Fulfills all-college language requirement for students entering Principia with insufficient preparation for exemption from further language study.

Prerequisite: FREN 104 or placement.

FREN 130 Language and Culture Abroad I 3.0-6.0 SH [GE2L]

Elementary language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.

Class Level Restriction: Freshman and Sophomore only.

FREN 200 French Culture: Cinema 1.0 SH []

Weekly watching and discussion of French/Francophone movies. Class taught in English, movies with subtitles, open to all students.

FREN 204 Intermediate French I 3.0 SH []

Develops speaking, reading, and writing skills. Culture and history used as basis for reading and speaking.

Prerequisite: FREN 105 or placement.

- FREN 205 Intermediate French II** 3.0 SH []
Development of fluency and accuracy in oral and written expression, through reading and listening comprehension.
Prerequisite: FREN 204 or placement.
- FREN 210 Intermediate Writing Review** 1.0-3.0 SH []
Allows students to develop their writing skills and to review some aspects of French grammar, through weekly compositions based on written texts or video material. May be taken for up to 4 SH in any combination.
- FREN 216 Intermediate Conversation** 3.0 SH []
Discussions on issues of French/Francophone civilization and culture, through video watching, conversation and reading, with an emphasis on developing oral comprehension skills.
Prerequisite: FREN 204.
- FREN 220 Contemporary French Society** 3.0 SH []
An analysis of contemporary French society focusing on social class/power, gender, immigration/ethnicity, plus the religious and educational systems. Students who complete all assignments in French receive credit towards a French major. May be offered on campus as well as on Principia abroad.
- FREN 225 Intermediate Grammar I** 3.0 SH []
Exercise in grammar and style. This course reinforces the student's foundation in written French at the intermediate level, as a preparation for further studies in French or as a refresher course.
Prerequisite: FREN 204 and FREN 205, or placement.
- FREN 226 Intermediate Grammar II** 1.0-3.0 SH []
Exercises in grammar and style to complement and strengthen the student's foundation in grammar at the intermediate level.
Prerequisite: FREN 204 and FREN 205 or placement.
- FREN 230 Language and Culture Abroad II** 3.0-6.0 SH []
Intermediate language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.
- FREN 241 French Pronunciation** 1.0 SH []
Introduction to French phonetic theory and practice of pronunciation of modern French.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
- FREN 250 French Cultural Studies** 3.0 SH []
Develops reading skills and understanding of Francophone literature. Prepares students for further study of French literature.
Prerequisite: FREN 205.
- FREN 255 Textual Analysis and Writing** 3.0 SH []
Develops style and grammatical correctness; intensive work on creative writing with some reading. Includes practice in textual analysis and analytic writing about literary texts.
Prerequisite: FREN 205, FREN 225, or FREN 226.
- FREN 260 Reading French Through Time** 3.0 SH []
This course approaches French literary history as a textual journey through time, using excerpts of major French literary texts from the Medieval to the contemporary period. Students develop reading, writing, oral, and analytical skills in French at the intermediate level.
Prerequisite: FREN 205 and FREN 255.
- FREN 270 Intro to French Literature** 3.0 SH [GEH]
This course covers genre studies across the centuries, from the classics to the modern period, with the reading of complete works related to French culture. Students learn to analyze texts and improve their oral and written expression.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.

- FREN 300 Love, Reason, and Monarchy** **3.0 SH** **[GEH]**
Genre studies in 17th and 18th century literature showing how power, love, and reason interplay in the French society of absolute monarchy.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 310 Advanced French** **3.0 SH** **[]**
Intensive analytical grammar and reading. Develops writing skills.
Prerequisite: three French courses above FREN 205 or placement.
Class Level Restriction: Junior and Senior only.
- FREN 316 Advanced French Conversation** **1.0 SH** **[]**
Reading, conversation, and writing on topics of French/Francophone culture and history.
Class Level Restriction: Junior and Senior only.
- FREN 320 Topics in French Literature** **1.0 SH** **[]**
Allows students to develop their reading skills and to broaden their knowledge of French literature. May be taken up to four times, with the consent of the instructor. Counts only once toward the French major.
Class Level Restriction: Junior and Senior only.
- FREN 325 Advanced French Grammar** **1.0 SH** **[]**
Course develops writing skills at the advanced level, focusing on grammar through exercises.
Prerequisite: two French courses at the 200 level.
Class Level Restriction: Junior and Senior only.
- FREN 330 Language & Culture Abroad III** **3.0-6.0 SH** **[]**
Advanced language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.
Class Level Restriction: Junior and Senior only.
- FREN 340 Image & Power in 19th C France** **3.0 SH** **[]**
This course looks at images of power and the power of images in 19th century France through a study of major literary movements and authors of the period, in their cultural context. This course develops reading, oral, written, and analytical skills.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 350 20th Century: Mind Revolutions** **3.0 SH** **[]**
This course looks at the twentieth century in France as an era of mental revolutions that helped to transform France and the French-speaking world. Reading of major literary authors of the period as well as oral and written textual analysis of the texts in their cultural contexts.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 360 Seminar in French Literature** **3.0 SH** **[]**
Seminar in a particular topic of French literature. Offered upon sufficient demand. The title will be extended to describe the current topic.
Prerequisite: FREN 255 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 470 Capstone** **1.0-3.0 SH** **[]**
This independent course consists primarily of self-directed research concerning French literature or culture. After research and reading of original texts dealing with a topic (primary and secondary sources), the student writes a capstone paper, but will also demonstrate, through other review and written or oral tests, mastery and understanding of essential aspects of the French language and culture. Open to French majors.
Prerequisite: at least two of the following: FREN 300, FREN 340, FREN 350.
Class Level Restriction: Senior only
Field of Study Restrictions: French Majors only.

General Education (GEN)

GEN 101 FYE: Integrated Learning 3.0 SH []

This foundational course serves to develop, practice, and apply college-level reading, critical thinking, writing, information literacy, and speaking skills. As part of each FYE program, this course develops skills through one or two content areas of the specific FYE program. Students complete an annotated bibliography, a written research project, and a presentation.

Class Level Restriction: Freshman only.

German (GER)

GER 104 Elementary German I 5.0 SH []

Understanding, speaking, reading, and writing of simple German. Emphasis on gaining command of the German sentence structure in the present tense, speaking idiomatic German, and absorbing elements of German culture.

GER 105 Elementary German II 5.0 SH [GE2L]

This second semester of the elementary language sequence continues the goals of the first semester with an emphasis on the acquisition and practice of the past and future tenses in written and spoken German.

Prerequisite: GER 104 or placement.

Global Studies (GLBS)

GLBS 115 Global Citizenship 1.0 SH []

This course introduces students to both the Global Studies major and the concept of global citizenship which is one of the learning outcomes for the Global Studies major. Students will discuss various definitions, values, and practices of a global citizen and will define the concept for themselves.

Class Level Restriction: Freshman and Sophomore only.

GLBS 225 Global Issues 3.0 SH []

This course introduces students to issues that are global in scope and that raise complex problems that need to be considered with the concepts and tools of more than one discipline.

Class Level Restriction: Freshman and Sophomore and Junior only.

GLBS 230 Global Changemakers 3.0 SH [GESS]

This course explores what it means to be a global changemaker through examining the lives, qualities, and leadership styles of individuals whose ideas have had a global impact.

GLBS 235 International Organizations 3.0 SH []

This course introduces students to the roles that major international organizations play in addressing global issues and to the controversies surrounding these organizations. Organizations covered may include the United Nations, World Bank, IMF, and regional international organizations.

GLBS 250 Contemporary Global Topics 2.0-3.0 SH []

This course is an exploration of a contemporary topic or issue in Global Studies. The course will examine both factors that make this issue complex as well as potential solution-oriented strategies for this issue. Title extended to identify current topic. May be taken more than once provided topics differ. Only one 3SH course may count toward the Global Studies major/minor.

GLBS 270 World Focus Seminar 1.0 SH []

In this course, students develop an awareness of the major problems of the world and the way in which these problems are interconnected through the study of geography and current events. May be taken four times up to a total of four semester hours.

Field of Study Restrictions: Global Perspectives, Global Studies Majors and/or Minors only.

- GLBS 275 Transformative Mediation & ADR** 3.0 SH [GESS]
 This course introduces students to Alternative Dispute Resolution techniques with a specific focus on Mediation. Students learn deep-reading techniques, critical thinking and evaluation of data, detailed nuances of interpersonal communication, persuasion and negotiation. True peacemaking brings parties together in a non-adversarial atmosphere and uses language and techniques that demonstrate impartiality, confidentiality, creativity, and flexibility. The goal is harmonious resolution.
- GLBS 290 Methods for Global Research** 3.0 SH [GESS]
 Provides students with a foundation in qualitative and quantitative methods as applied to global research. This course will include practical and ethical issues related to doing global research, applied exercises in the methods covered, and analysis of methods in practice.
Prerequisite: GLBS 115.
Class Level Restriction: Sophomore and Junior and Senior only.
- GLBS 315 Strategies to Global Solutions** 3.0 SH []
 This course introduces students to strategies that could be used to solve complex, global issues. These strategies include the lenses of social innovation, systems thinking, transdisciplinary thinking; problem solving; and intercultural communication. Students first study a complex, global issue of their choice and then create their own project-based social innovation for this issue.
Prerequisite: GLBS 225 or SUS 151.
Class Level Restriction: Sophomore and Junior and Senior only.
- GLBS 320 Development & Underdevelopment** 3.0 SH []
 This course enables students to analyze the complex problem of global poverty. The course will consider historical, political, economic, social, and cultural factors that contribute to poverty in developing countries, as well as approaches to development.
Class Level Restriction: Junior and Senior only.
- GLBS 350 Nonprofits: Theory & Practice** 3.0 SH []
 This course introduces students to the U.S. and international nonprofit sectors including historical and social foundations, best practices and theories within the sector, and major trends.
Class Level Restriction: Junior and Senior only.
- GLBS 405 Internship** 1.0-6.0 SH []
 This course provides an opportunity to gain practical experience in fields related to Global Studies. Includes field sponsor supervision, journals, colleague interviews, and final research paper. Title will be extended to describe the topic. May be offered for variable credit from one to six semester hours. May be repeated once for a total of 6 SH if internship sites differ.
- GLBS 410 Global Citizenship Project** 1.0-3.0 SH []
 An independent, student-designed project under faculty supervision that results in growth in the knowledge, attitudes, and skills associated with global citizenship. May be offered for variable credit from one to three semester hours. May be repeated once for a maximum of 6 semester hours.
Prerequisite: GLBS 115.
Class Level Restriction: Junior and Senior only.
- GLBS 431 Worldography** 3.0 SH []
 A seminar involving critical reading and discussion of outstanding books on different world-encompassing issues. A set of criteria is applied to each book to determine its effectiveness. Open only to Global Studies majors.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Global Studies Majors only.
- GLBS 440 Global Studies Capstone** 3.0 SH []
 Individual research and writing on a complex, global issue and its potential solutions. Course work culminates in a significant research paper.
Class Level Restriction: Junior and Senior only.

History (HIST)

HIST 110 Fndn. of American Liberty 3.0 SH [GEH]

A survey of American history from the colonial era to the present which looks at how the concept of liberty has both changed and been changed through the centuries.

Class Level Restriction: Freshman and Sophomore only.

HIST 111 Historical Perspectives 3.0 SH [GEH]

Develops a particular historical theme or subject for the exploration of the nature and purpose of history and what the historian does. Analyzes the connection between historical study and the modern world.

The title will be extended to describe the current topic. May be taken twice provided the topics differ.

Class Level Restriction: Freshman and Sophomore only.

HIST 140 Fndn. of Western Thought 3.0 SH [GEH]

A survey of European history from its earliest roots to the modern era which looks at how Western civilization and culture was formed and has evolved over the centuries.

Class Level Restriction: Freshman and Sophomore only.

HIST 160 U.S. in the 20th Century 3.0 SH [GEH]

The transition from a rural to an urban and industrial society and the emergence of the United States as a world power. Topical treatment of problem areas in modern U.S. history.

Class Level Restriction: Freshman and Sophomore only.

HIST 180 Fndns. of the Globalized World 3.0 SH [GEH]

A survey of global history which looks at the concept of global civilization and studies the patterns and trends found in the emergence, development, and fall of civilizations in an increasingly interconnected world.

HIST 189 Religious Conflict & History 3.0 SH [GEH]

The course emphasizes the importance of global religions on the world political scene with greater relevance to the historical roots of religious and political disputes in such hotly-contested areas as Israel, India-Pakistan, Northern Ireland, Sudan, and South Sudan.

HIST 195 People of Courage 3.0 SH [GEH]

Course explores people of courage who took dramatic initiatives, often facing tradition, hostility, prejudice, and skepticism, and made a lasting contribution to humanity. Students study the people and their times, the conditions and environment within which they worked.

Class Level Restriction: Freshman and Sophomore only.

HIST 202 American Revolution 3.0 SH [GEH]

Discusses the late colonial period, the Revolutionary War, and the emerging republic. Focuses on the issues surrounding the emergence of the new democracy in North America, with emphasis on the period from 1754-1800. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.

HIST 203 U.S. Civil War Era 3.0 SH [GEH]

The great cultural tragedy of 19th-century American experience. Focus is on the causes and effects of divergent growth patterns of South and North including a careful examination of American slavery; personalities of the sections; political, social, and military activities of the war; specific focus on Abraham Lincoln's impact on the crisis. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.

HIST 205 American Revolution:Then&Now 3.0 SH [GEH]

This course looks at the American Revolution as a work in progress from colonial anticipations and concerns through the Civil War which brought contemporary closure to two outstanding issues, slavery and states' rights, and then to more contemporary issues under the Constitution and Bill of Rights: free speech, religious freedom, individual liberty, equal opportunity, the right to bear arms, and privacy. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.

- HIST 216 Ancient Greece and Rome 3.0 SH [GEH]**
A study of classical Greek and Roman civilization from the age of Homer to the fall of Rome. Emphasis is placed on Athenian democratic institutions and cultural achievements and on Roman political, economic, and judicial developments.
- HIST 220 Civilization 3.0-5.0 SH [GEH]**
The application of historical method to the observation, description, and survey of a national culture. Each time the course is taught, it focuses on a particular nation and the title will be extended to describe the current civilization studied. May be taken more than once provided the cultures studied are different. Taught only on Principia abroad programs.
- HIST 221 Immigration and Acculturation 3.0 SH [GEH]**
Using a historical lens, students are introduced to major periods of immigration in America and the issues of immigration at each point in time. Students examine and use data sets to see how social scientists gather, interpret, and report data on immigration and acculturation at the local, state, and national level.
- HIST 222 Latin America 3.0 SH [GEH]**
Background and historical development of Latin American countries of South and Central America. Emphasis is placed on understanding their historic and present importance to the U.S., difficulties they face, and issues of current importance.
- HIST 227 Women in American History 3.0 SH [GEH]**
This course examines women's lives in the United States from the colonial period to the present. Themes include the private and family experiences of women, the nature of women's work and education, and the political and civic role of women. The class also looks at how differences of class, ethnicity, and race have affected women's experiences.
- HIST 228 History of France 3.0 SH [GEH]**
A survey of France's central role in the shaping of European civilization from pre-Roman times to the present day. The course traces France's development through the consolidation and centralization of the nation-state, the French revolutions of the 18th and 19th centuries, and France's modern struggle to accommodate to a powerful Germany within an increasingly integrated Europe.
- HIST 234 Radicalism in Modern America 3.0 SH [GEH]**
The course examines radical organizations on both sides of the political spectrum. Focuses on the individuals and groups that decided only radical actions could solve America's problems. The class covers the 19th century to the present, with a focus on the Ku Klux Klan, the Populists, the Communist Party, and the Weather Underground Organization.
Class Level Restriction: Sophomore and Junior and Senior only.
- HIST 235 African American History 3.0 SH [GEH]**
This course surveys African American history from the Atlantic slave trade through the present day. Students examine the social, economic, intellectual, and political forces that shaped the lives of African Americans, as well as the ways African Americans shaped the course of United States history. A particular focus is African Americans' long fight for civil rights.
- HIST 240 The History of Islam 3.0 SH [GEH]**
This course explores the roots of the Muslim religion in the Middle East and its rich cultural legacy. It also examines the complex and sometimes bitter relationship of Islam to the West. While the course highlights the achievements of the Ottoman and Mughal empires in Turkey and India respectively, it also serves to address the current ideological contest between Western secularism and Islamic fundamentalism as reflected in the current controversies over Jihad.
- HIST 252 Britain 3.0 SH [GEH]**
A survey of British history from the time of Roman occupation to the 21st century. There is a particular focus on the role of the monarchy, the emergence of Britain's political and social structure in an analysis of the revolutionary nature of British history, and the collapse of the empire at the end of World War II.

- HIST 255 The Middle Ages** **3.0 SH** **[GEH]**
 The events, ideas, and people that shaped the foundations of Western civilization. This course covers the period from the fall of the Roman Empire until the Renaissance of the 15th century. Topics include the evolution and legacy of feudalism, the rise of towns, the growth of national monarchies, the medieval church and its influence, the Crusades, and the intellectual contest between faith and reason.
- HIST 260 From Renaissance to Revolution** **3.0 SH** **[GEH]**
 This survey examines the events and changes in thought that shaped the modern European world and its global impact between the end of the Middle Ages about 1400 C.E. and the American and French Revolutions at the end of the 18th century. Major topics include the Renaissance, the Protestant Reformation, the scientific revolution, the growth of nation-states, Europe's global expansion, the Enlightenment, and the movement toward democracy and industrial society by the close of this period.
- HIST 264 Revolutionary Europe 1800-1914** **3.0 SH** **[GEH]**
 This course focuses on the dramatic political, economic, and social transformations of 19th century Europe with special emphasis on France, Germany, and Britain. It examines new thought patterns that took form in the many "isms" of these times and their implications for the contemporary world. Covers the period from the French Revolution to World War I.
- HIST 265 20th Century Europe** **3.0 SH** **[GEH]**
 An examination of the major developments in Europe since World War I with special emphasis on Germany and the Soviet Union. The course investigates the continuing development of new thought patterns, especially those that result from reactions to World Wars I and II.
- HIST 270 History Focus Seminar** **1.0 SH** **[]**
 This seminar develops an awareness of major problems/issues in the world today, including a geographical understanding of those problems/issues and an historical understanding of the way in which they are interconnected. May be taken four times up to a total of four semester hours.
Field of Study Restrictions: History Majors and/or Minors only.
- HIST 275 South African History** **3.0 SH** **[GEH]**
 The course explores the complicated pattern of race relations in South Africa, intensifying under the apartheid system and the country's emergence as a fully democratic state in the modern era.
- HIST 281 China** **3.0 SH** **[GEH]**
 Past political, social, and cultural characteristics which help to explain the nature of present-day challenges in China.
- HIST 282 German Democracy Before Hitler** **3.0 SH** **[GEH]**
 An examination of the reasons for the failure of Germany's first experiment with democracy in 1918-33. Students consider the effects of the Versailles Treaty, German political traditions and attitudes, contemporary cultural and intellectual trends, economic factors, and the international context. They also try to identify criteria that help determine success or failure for a fledgling democracy.
- HIST 283 Japan** **3.0 SH** **[GEH]**
 Survey of the political, economic, social, intellectual, and foreign policy aspects of Japanese history from 600 AD to the present. Particular focus is placed on Japan's attempts to establish a central government prior to 1600, as well as Japan's quest for national identity and security in the 20th century.
- HIST 288 The Age of FDR** **3.0 SH** **[GEH]**
 This class focuses on how all Americans endured and eventually prevailed over the dual travails visited on their country between 1929 and 1945: the Great Depression and World War II.
- HIST 297 Historical Thinking & Research** **3.0 SH** **[]**
 An introduction to the field of history as a way of thinking and an evolving body of research via exploration of the discipline through the following topics: what is history; an introduction to historiography, the theory and practice of history, locating sources, bridging disciplines, utilizing a multicultural lens with cultural sensitivity, recognizing moral issues, and the ethics of the profession.
Class Level Restriction: Sophomore and Junior only
Field of Study Restrictions: History, Religion, Religious Studies Majors and/or Minors only.

- HIST 301 Social Issues and the Courts 3.0 SH [GEH]**
 This course looks at current social issues such as free speech, abortion, privacy, affirmative action, crime, hate speech, "taking," and states' rights from the perspective of evolving discussions of the meaning of the United States Constitution/Bill of Rights in society and in the courts. The focus is on legal reasoning in U.S. Supreme Court cases and the attempt to balance historical and evolving interpretations of the Constitution with the contemporary circumstances that generated the legal cases.
Class Level Restriction: Junior and Senior only.
- HIST 310 The Cold War 3.0 SH []**
 An examination of the causes, development, and eventual resolution of the U.S. - Soviet confrontation from the breakdown of the World War II alliance to the disintegration of the Soviet Union. Topics include the division of Germany and Europe, the Korean conflict, the nuclear arms race, superpower competition for the Third World, detente, and the reasons for the Soviet Union's ultimate collapse.
Class Level Restriction: Junior and Senior only.
- HIST 311 Topics in History 3.0 SH [GEH]**
 A seminar on a topic in history at the advanced level. The content varies, and the title will be extended to describe the current topic. May be repeated up to a total of three times provided the topics differ.
Class Level Restriction: Junior and Senior only.
- HIST 313 Africa 3.0 SH [GEH]**
 A survey of ancient civilizations, to the European conquest and colonization of the continent, to contemporary liberation and modernization. Source readings include anthropological studies.
Class Level Restriction: Junior and Senior only.
- HIST 333 Russia 3.0 SH [GEH]**
 A survey analyzing the origins of Russian nationality, the rise of the Muscovite Tsarist state, Imperial development from Peter the Great to the Revolution of 1917, the Soviet System and its fall.
Class Level Restriction: Junior and Senior only.
- HIST 335 Middle East 3.0 SH [GEH]**
 Past political, social, and cultural circumstances which explain the nature of present problems.
Class Level Restriction: Junior and Senior only.
- HIST 363 Conflict in Amer: The 1960s 3.0 SH [GEH]**
 Analysis of the history of the United States during the 1960s, with emphasis on events reflecting social, cultural, and political conflict and protest. Analyzes pre-1960s trends and post-1960s effects. Covers social movements, political protest and radicalism, Vietnam, civil rights, music, and the counterculture.
Class Level Restriction: Junior and Senior only.
- HIST 382 Modern China 3.0 SH []**
 A study of the major historical events in China from WWI to the present. Culture, politics, economics, and social factors are some of the key focal areas of concern.
Class Level Restriction: Junior and Senior only.
- HIST 402 Reading in History 3.0 SH []**
 Individual reading in student-selected and faculty-approved topics in history. Designed for majors seeking to deepen their knowledge of a specific field of history.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: History Majors only.
- HIST 431 Historiography 3.0 SH []**
 Critical readings of a selection of historical works focused on a common theme. Seminar conducted by the entire history faculty.
Prerequisite: 3.0 GPA.
Class Level Restriction: Junior and Senior only.

- MCOM 181 Photography Fundamentals** 3.0 SH [GEA]
 A foundation course to learn the craft of digital photography. Students learn how to tell stories visually while developing their photographic skills by learning how to control their cameras and the photographic process. The nature of assignments range from photojournalism to the fine-art type.
Class Level Restriction: Freshman and Sophomore only
Fee=\$70.00.
- MCOM 185 Photography Field Study** 1.0 SH []
 This is a field study course in the basic application of photographic skills to telling a fact-based story through images. Working with digital cameras, students learn to design and execute a documentary story about a subject, showing basic proficiency in technical skills. The emphasis will be on making and editing images into a coherent and revealing narrative. DSLR camera required.
Prerequisite: MCOM 181. Concurrent registration permitted. Fee amount varies depending on location and length of program and will be provided on the course schedule for the individual offering.
Fee=\$750.00.
- MCOM 210 Media Reporting and Writing** 3.0 SH []
 A beginning course for those aspiring to work in the media or in a media-related field such as public relations. Students have intensive training in interviewing, gathering information, and writing in a clear, news style. They learn to edit and critically evaluate media writing as well as write to a standard worthy of publication in print or on-line.
- MCOM 224 Feature Writing** 3.0 SH []
 Instructs students in writing a wide variety of feature stories, ranging from the types commonly associated with newspapers to those in print, broadcast, and online magazine formats.
Prerequisite: MCOM 210.
- MCOM 226 Opinion Writing** 3.0 SH []
 For students who have mastered the basics of news writing, this class explores the foundations of expressing advocacy and opinion on topics of contemporary significance. Students practice writing and editing editorials, op-ed columns, and reviews.
- MCOM 228 Newspaper Practicum** 0.5-1.0 SH []
 Practicum for writers/reporters, editors, and staff of *The Pilot*, the college newspaper. May be offered for variable credit from .5 to one semester hour. May be taken six times up to a total of six semester hours.
- MCOM 235 Communication Seminar** 3.0 SH []
 This course is tailored to examine recent developments, social trends, and shifting technologies not covered in the regular mass communication curriculum. The title will be extended to describe the current topic. May be taken twice provided the topics differ.
Prerequisite: MCOM 110 and MCOM 210.
Class Level Restriction: Junior and Senior only.
- MCOM 236 Mrs. Eddy and The C.S. Monitor** 3.0 SH []
 This course explores the historical context in which Mary Baker Eddy founded *The Christian Science Monitor*. This includes examination of the period of yellow journalism, relevant developments in Mrs. Eddy's life, and the *Monitor's* impact in the world of media.
- MCOM 240 Broadcast Journalism** 3.0 SH []
 This course introduces students to the processes, skills, and ethics of developing, writing, delivering, and producing journalistic content for the broadcast media. Topics covered may include the following: on-air news writing; adapting print news for on-air delivery; producing feature stories and interviews for radio and television.
Prerequisite: MCOM 210.
- MCOM 241 Television Workshop** 3.0 SH []
 Students plan, write, videotape, edit, anchor, and produce a television news program for broadcast to the community. Topics may range from news to election coverage.
Fee=\$40.00.

- MCOM 242 Speech Skills for the Media** 3.0 SH []
Provides students with a variety of speech skills that would be useful to them in media professions. Among the skills included are interviewing on and off camera, radio and television news reading, extemporaneous speaking, oral reading, group discussion, and impromptu speaking.
- MCOM 246 Television Practicum** 0.5-1.0 SH []
Develops television skills through experience working on special broadcasting projects under supervision of mass communication faculty. May be offered for variable credit from .5 to one semester hour. May be taken six times up to a total of six semester hours.
- MCOM 251 Radio Broadcasting** 3.0 SH []
Using Principia Internet Radio (PIR) facilities, students create, produce, direct, voice, and operate their own live radio programs and create promotional materials in a variety of formats. Emphasis on effective communication of ideas. Students in the workshop also assist each other in critiquing and improving their work on a regular basis.
- MCOM 258 Podcasting** 3.0 SH []
Podcasting is a significant media development of the 21st century, and is used for purposes ranging from journalism to storytelling to marketing. In this course, we'll explore why podcasting has become so popular in the last few years, what its unique strengths are as a medium, and the most effective tools and strategies for creating a podcast.
- MCOM 263 Public Relations** 3.0 SH []
This introductory class instructs students in the theory and techniques of public relations practice: why organizations must deal effectively with various publics, how to write a news release, how to interact with the media. Corporate and agency public relations are both examined. Case studies that highlight effective public relations strategies are considered. A special section on crisis communications is included.
- MCOM 266 Public Relations Writing** 3.0 SH []
Students learn to write effectively across a variety of formats and media used by today's public relations professionals. Various forms include press releases; public service announcements; query, pitch, and cover letters; media alerts; features; newsletters; backgrounders; and elements of public relations presentations. There is particular emphasis on strategizing and crafting persuasive public relations messages.
Prerequisite: MCOM 263.
- MCOM 281 Photojournalism** 3.0 SH []
An applied study of how photojournalists report the news in a visual form. Working in digital photography, students learn how to capture the peak moment while refining their sense of content, aesthetics, news judgment, and ethics.
Prerequisite: each student must supply a digital single lens reflex camera.
- MCOM 282 Intermediate Photography** 3.0 SH []
This course is both a theoretical and a practical study of photography with a particular focus on lighting. Through a critical study of the current and past masters of photography, students work toward defining their own vision and photographic portfolio.
Prerequisite: MCOM 181. Prior experience in photography will be taken into consideration. Each student must supply a digital single lens reflex camera.
Fee=\$70.00.
- MCOM 283 Yearbook Editing** 1.0 SH []
Practicum for the editor(s) of *The Sheaf*, the college yearbook. A team approach is encouraged. May be taken twice.
Prerequisite: member of *The Sheaf* editing staff.
- MCOM 284 Photography Practicum** 1.0 SH []
Practicum for staff photographers of *The Sheaf*, the college yearbook. Students receive focused instruction on photography including composition, working with subjects, and ethics in photography. May be taken more than once up to a total of four semester hours.

- MCOM 286 On-Location Digital Media Prod 3.0-4.0 SH []**
 An introduction to graphic design with an emphasis in digital media and design. Develops basic skills in designing with photographs, illustrations, and typography for print and digital media devices. Strategies and processes are examined and developed for work on location. Fundamental design principles are explored in depth. To be taught only on an abroad program.
- MCOM 292 Video Production 3.0 SH []**
 A foundation course exploring video production in both a theoretical and practical way. Through hands-on assignments, students develop their skills in camera operation, audio, lighting, and editing, as well as gaining experience expressing messages and stories visually. Prior knowledge or production experience is not necessary.
Fee=\$100.00.
- MCOM 293 Corporate Video 3.0 SH []**
 Students study the theoretical approaches to creating the very specific video messages that companies and organizations use to deliver corporate messages to internal and external target audiences. Includes practical experiences producing corporate videos for clients on or off campus. Prior knowledge or production experience is not required.
Fee=\$100.00.
- MCOM 301 Mass Media in Society 3.0 SH []**
 Explores the relationship between media and society, in particular how one can influence the other. Looks at theories of media impact as well as methods of research to determine those impacts. Includes readings and discussion of contemporary media controversies. Builds a foundation for understanding the power, and limits, of media.
Prerequisite: MCOM 110.
Class Level Restriction: Junior and Senior only.
- MCOM 302 Media Law and Ethics 4.0 SH []**
 Study of the legal and ethical foundations of mass media, as well as how they are changing. Explores the constitutional issues of free press and privacy, as well as the regulation of broadcasting and advertising. Taught as a lab course, using case studies.
Prerequisite: MCOM 110.
Class Level Restriction: Junior and Senior only.
- MCOM 322 Advanced Reporting and Writing 3.0 SH []**
 The advanced study of print and web journalism, including practice of various styles of writing, ranging from editorials and investigative reporting to features and blogging. Also explores traditional and emerging organizational structures of newsrooms, web sites, and other journalistic entities.
Prerequisite: MCOM 210.
Class Level Restriction: Junior and Senior only.
- MCOM 339 Multi-Platform Storytelling 3.0 SH []**
 Course explores the proliferation of new media forms driving the growth of trans-media or multi-platform storytelling. The course teaches both storytelling across different media using the same source material and complex (multi-dimensional) storytelling across multiple media.
Prerequisite: MCOM 210 or MCOM 240.
Class Level Restriction: Junior and Senior only.
- MCOM 354 Advanced Radio Broadcasting 3.0 SH []**
 Using the facilities of Principia Internet Radio (PIR), students develop advanced techniques to create, produce, direct, voice, and operate their own live radio programs and create promotional materials in a variety of formats. Emphasis on effective communication of ideas. Students in the workshop also assist each other in critiquing and improving their work on a daily basis.
Prerequisite: MCOM 251.
Class Level Restriction: Junior and Senior only.

MCOM 388 The Photographic Essay 4.0 SH []

This advanced study of photojournalism occurs through working in-depth on a specific project culminating in a photo story/essay. Through this course, students expand their photographic skills while further refining their sense of content, aesthetics, news judgment, and ethics.

Prerequisite: MCOM 281, and each student must supply a digital single lens reflex camera.

Class Level Restriction: Junior and Senior only

Fee=\$105.00.

MCOM 392 Documentary Video 3.0 SH []

Students add to skills learned in previous video classes as they learn to document reality in an informative and entertaining way, telling stories visually about real life.

Prerequisite: MCOM 292 or MCOM 293.

Class Level Restriction: Junior and Senior only

Fee=\$20.00.

MCOM 400 Internship 3.0-6.0 SH []

Students participate in an off campus pre-professional field experience in media, television, film, radio, photography, graphics, journalism, or public relations. Students have primary responsibility for locating an internship opportunity with the assistance of a Mass Communication faculty advisor.

Class Level Restriction: Junior and Senior only.

MCOM 411 Adv Topics in Communication 3.0 SH []

This seminar for juniors and seniors is built around the reading and study of historical and contemporary key non-fiction texts in the field of mass communication linked to a theme, such as the history of media, the foundational differences across the globe, and theories about media impact. The title will be extended to describe the current topic. May be taken twice provided the topics differ.

Prerequisite: MCOM 110 and MCOM 301.

Class Level Restriction: Junior and Senior only.

Mathematics (MATH)**MATH 099 Basic Math Tutorial 0.0 SH []**

A two-hour-per-week, non-credit guided tutorial for students needing review of arithmetic.

MATH 110 Mathematical Applications 3.0 SH <GEM> [GEQR]

Applications of elementary mathematics in the fields of management, social sciences, information sciences, statistics, physical and life sciences, and economics. Mathematical topics may include graph theory, linear programming, statistics, probability, voting systems, fair division, game theory, apportionment methods, coding methods, cryptography, logic, problems of scale, symmetry, patterns, tilings, exponential models and other growth models in finance, business, and biology.

Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above.

Class Level Restriction: Freshman and Sophomore only.

MATH 111 A Survey of Mathematics 3.0 SH <GEM> [GEQR]

A conceptual and historical overview of mathematics. A survey of selected topics such as: what mathematics is; numeration; elementary number theory; math and music; geometry and art; loans and payment plans; numbers, equations, and graphs; counting and probability; statistics; and geometric modeling. Intended for non-science majors.

Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades C or above.

Class Level Restriction: Freshman and Sophomore only.

MATH 140 Trigonometry 3.0 SH <GEM> []

Geometry review, angle measures, trigonometric functions - properties and graphs, trigonometric identities, inverse functions, trigonometric equations, solving general triangles. Possible additional topics: polar coordinates, spherical trigonometry, and hyperbolic trigonometry.

Prerequisite: High School Geometry and Intermediate Algebra. Success in this course depends upon students having completed a high school second-year algebra course and a high school geometry course with a grade of C or above.

MATH 141 College Algebra 3.0 SH <GEM> []

Topics include the theory of solving polynomial equations; solving simultaneous linear equations; graphs and properties of polynomial functions, rational functions, exponential functions, logarithmic functions, and conic sections; and mathematical induction and the general binomial expansion.

Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above.

MATH 143 Precalculus 4.0 SH <GEM> []

Investigates properties of functions, techniques for solving equations and inequalities and graphing. Emphasizes polynomial, rational, algebraic, exponential, logarithmic, and circular functions as well as conic sections and trigonometry.

Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above.

Class Level Restriction: Freshman and Sophomore only.

MATH 164 Introduction to Statistics 3.0 SH <GEM> [GEQR]

Descriptive statistics including measures of central tendency, measures of dispersion, correlation and regression; basic concepts of probability; inferential statistics including estimation and hypothesis testing. Applications in biological and social sciences.

Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above. (A student may receive credit for only one of the courses MATH 164 or BNR 215.).

MATH 181 Calculus I 5.0 SH <GEM> []

First semester of single-variable calculus. Includes a review of properties of elementary functions, limits, derivatives, applications of derivatives, continuity, the definite integral, basic antiderivative formulas, the Mean Value Theorem, and the Fundamental Theorem of Calculus.

Prerequisite: MATH 143.

Class Level Restriction: Freshman and Sophomore only.

MATH 182 Calculus II 5.0 SH <GEM> []

Second semester of single-variable calculus. Includes a review of Calculus I, techniques of integration, applications of the definite integral, an introduction to differential equations, parametric equations, polar coordinates, and the theory of infinite sequences and series, including tests for convergence and Taylor Series.

Prerequisite: MATH 181.

Class Level Restriction: Freshman and Sophomore only.

MATH 211 History of Mathematics 2.0 SH []

A concise history of mathematics. Includes topics from mathematics in early civilizations, Greek mathematics from classical, first Alexandrian, and second Alexandrian periods, Hindu and Arabic contributions, European Renaissance, the calculus controversy, non-Euclidean geometry, the rise of analysis, Gödel's Incompleteness Theorem, and the loss of certainty.

Prerequisite: MATH 181 or taken concurrently.

MATH 220 Mathematical Proofs 2.0 SH []

Investigates the nature and structure of mathematical proofs found in calculus, algebra, and geometry. Includes set theoretic foundations, the rules of propositional logic, the principle of mathematical induction, and the nature of deductive reasoning. Analyzes various proofs from geometry, algebra, and calculus as well as provides students with practice in constructing such proofs.

Prerequisite: MATH 182.

- MATH 261 Discrete Math** 3.0 SH <GEM> []
Nature of proof, sets, graph theory, logic, Boolean algebra, functions and relations.
Prerequisite: MATH 143.
- MATH 273 Linear Algebra** 3.0 SH []
Vector spaces, vector and matrix operations, determinants, linear transformations, systems of linear equations, change of basis, eigenvalues.
Prerequisite: MATH 181.
- MATH 283 Multivariable Calculus** 4.0 SH []
Includes vector algebra and coordinate geometry in two and three dimensions, partial differentiation, directional derivatives, slope fields, multiple integration and applications, line and surface integrals, Lagrange multipliers, vector calculus including Green's, Divergence, and Stokes' theorems.
Prerequisite: MATH 182.
- MATH 304 Synthetic Geometry** 3.0 SH []
An axiomatic development of Euclidean geometry using Hilbert's axioms; hyperbolic geometry and its models; a comparison of Euclidean, spherical, and hyperbolic trigonometries; may include an introduction to projective geometry.
Prerequisite: MATH 273. Strongly recommended MATH 220.
Class Level Restriction: Junior and Senior only.
- MATH 320 Elementary Number Theory** 3.0 SH []
Divisibility theory of integers, primes and their distribution, theory of congruences, Fermat's "Little Theorem," Euler's phi function, quadratic reciprocity, perfect numbers and Mersenne primes, Fermat's "Last Theorem."
Prerequisite: Strongly recommend MATH 220.
Class Level Restriction: Junior and Senior only.
- MATH 355 Applied Advanced Calculus** 3.0 SH []
Introduction to vector analysis: vector differential calculus, integral theorems, curvilinear coordinates. Fourier analysis: Fourier series and integrals, orthogonal functions, applications in boundary value problems. Offered every other year.
Prerequisite: MATH 283.
Class Level Restriction: Junior and Senior only.
- MATH 360 Numerical Analysis** 3.0 SH []
Theory and techniques for obtaining numerical solutions. Numerical methods are implemented by using computers. Topics include root-finding, interpolation, approximation of functions, numerical integration, differential and difference equation, applications in linear algebra, and error analysis. Offered every other year.
Prerequisite: MATH 273 and MATH 283.
Class Level Restriction: Junior and Senior only.
- MATH 364 Mathematical Statistics** 3.0 SH []
Probability, random variables, probability distributions, mathematical expectation, moments, moment generating functions, sampling distributions, Central Limit Theorem, estimation and hypothesis testing, correlation, curvilinear and multiple regression.
Prerequisite: MATH 283.
Class Level Restriction: Junior and Senior only.
- MATH 370 Topology** 3.0 SH []
Introductory point-set topology. Topological spaces, open and closed sets, bases, interior, closure, limit points and boundary of subsets, metric spaces, continuous functions, homeomorphisms, connectedness and compactness, as well as some applications.
Prerequisite: MATH 182. Strongly recommend MATH 220.
- MATH 374 Algebraic Structures** 3.0 SH []
Group theory, Boolean algebra, rings, integral domains and fields. Offered every other year.
Prerequisite: MATH 273.
Class Level Restriction: Junior and Senior only.

MATH 380 Differential Equations 3.0 SH []

Linear differential equations, Laplace transform methods, series solutions, numerical solutions, introduction to partial differential equations, applications.

Prerequisite: MATH 182.

MATH 415 Senior Capstone 3.0 SH []

Synthesizes and extends material from courses in the major using topics such as integration, linearity, optimization, periodicity, and expansions. Open only to mathematics majors.

Class Level Restriction: Senior only

Field of Study Restrictions: Mathematics BA, Mathematics BS Majors only.

MATH 421 Math Seminar 1.0-3.0 SH []

A seminar in selected topics in mathematics. The contents will vary, and the title will be extended to describe the current topic. May be taken more than once provided the topics differ.

Class Level Restriction: Junior and Senior only.

MATH 431 Complex Variables 3.0 SH []

Analytical functions, Cauchy's theorem, Taylor and Laurent series, residues, contour integration, integral transforms, conformal mapping.

Prerequisite: MATH 283.

Class Level Restriction: Junior and Senior only.

MATH 432 Real Analysis 3.0 SH []

Formal development of the concepts of real analysis. Includes limits and continuity, sequence and series, uniform convergence, Riemann integral.

Prerequisite: MATH 283. Strongly recommended: MATH 220.

Class Level Restriction: Junior and Senior only.

Music (MUS)**MUS 040 Applied Lessons (50 Minutes) 0.0 SH []**

Applied instrumental or vocal instruction. Thirteen 50-minute lessons per semester, with two hours of practice daily. For applied music lessons for credit, refer to MUS 120.

Fee=\$689.00.

MUS 044 Applied Lessons (25 Minutes) 0.0 SH []

Applied instrumental or vocal instruction. Thirteen 25-minute lessons or equivalent per semester, with one hour practice daily. For applied music lessons for credit, refer to MUS 130.

Fee=\$362.00.

MUS 050 College Choir - No Credit 0.0 SH []

Preparation and performance of choral literature focusing on concepts of style, ensemble, and vocal production. Open to the entire community without audition.

MUS 051 Chorus for Musical 0.0 SH []

Preparation and performance of chorus parts for the musical production. By audition only. Offered only in semesters when there is a musical production.

MUS 052 Prin Music Tour - No Credit 0.0 SH []

Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. A star (*) grade will be assigned until completion of the tour. Offered by invitation only. Offered on demand.

MUS 053 Baccalaureate Choir 0.0 SH []

Preparation and performance of choral selections for the Baccalaureate service held during commencement weekend. Open to the community without audition.

MUS 061 Orchestra - No Credit 0.0 SH []

Preparation and performance of instrumental literature covering style, expressive interpretation, and ensemble. Open to the entire community.

MUS 065	Jazz Ensemble	0.0 SH	[]
Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble, and improvisation techniques. Open to the entire community.			
MUS 071	Chamber Music - No Credit	0.0 SH	[]
Small chamber ensemble, vocal or instrumental. May be taken more than once.			
MUS 080	Student Recital - No Credit	0.0 SH	[]
Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval.			
Prerequisite: demonstrated proficiency on instrument or voice.			
MUS 100	Intro to the Art of Music	3.0 SH	[GEA]
Provides music listening skills, a knowledge of the elements and vocabulary of music, and an acquaintance with the styles and characteristics of classical music through the ages. Designed primarily for the non-major.			
MUS 101	Symphonic Masterworks	3.0 SH	[GEA]
A survey of symphonic masterworks. Focuses on the style characteristics of the great symphonic composers, a study of symphonic forms, and listening to selected symphonic masterworks. For majors and non-majors.			
MUS 102	Operatic Masterworks	3.0 SH	[GEA]
A survey of operatic masterworks. Focusing on the style characteristics of the great opera composers through viewing complete performances of the operas studied. For majors and non-majors.			
MUS 110	Introduction to Computer Music	1.0 SH	[]
Students learn to use the computer to create music. Various methods are presented including sound design and graphic software for sound creation and performance. Collaborative performance such as laptop orchestra is emphasized. May be taken six times up to a total of six semester hours.			
MUS 112	Music Recording Techniques	1.0 SH	[]
A study of the methods and techniques necessary to make basic and intermediate level acoustic audio recordings in a studio environment, including microphone placement, effects processing, mixing, basic mastering, and the use of the computer software. Study of the role of the producer and recording engineer is emphasized.			
MUS 115	Class Piano I	2.0 SH	[]
Keyboard skills covered include major and minor 5-finger patterns, beginning repertoire, major scales and arpeggios, basic chord progressions, triads, dominant-seventh chords, sight-reading, harmonization, transposition, and improvisation. No musical background is required. May be taken twice up to a maximum of four semester hours.			
MUS 116	Class Piano II	2.0 SH	[]
Course continues development of skills learned in MUS 115. Content includes increased focus on keyboard technique, minor scales and arpeggios, intermediate solo and ensemble repertoire, chord progressions, sight-reading, harmonization, transposition, and improvisation. May be taken twice up to a maximum of four semester hours.			
Prerequisite: MUS 115 (with a grade of C or higher).			
MUS 120	Applied Lessons (50 Minutes)	1.0 SH	[]
Applied instrumental or vocal lessons. Thirteen 50-minute lessons per semester, with two hours of practice daily.			
Fee=\$689.00.			
MUS 130	Applied Lessons (25 Minutes)	0.5 SH	[]
Applied instrumental or vocal lessons. Thirteen 25-minute lessons per semester, with one hour of practice daily.			
Fee=\$362.00.			

- MUS 139 Intro to Music Fundamentals** 3.0 SH []
Introduction to musical notation, rhythm, meter, scales, key signatures, triads, popular song forms and chord progressions, and basic musicianship skills.
Class Level Restriction: Freshman and Sophomore only.
- MUS 140 Music Theory & Musicianship I** 3.0 SH []
Review of notation, rhythm, meter, scales, key signatures, (intervals,) and triads. The course will advance to basic voice-leading. Involves melodic and rhythmic dictation, sight-singing, and performance skills. Students considering a B.A. Major in Music should complete Musicianship & Theory I and II (MUS 140 and MUS 160 & MUS 170) by the end of their sophomore year.
Prerequisite: music background.
Class Level Restriction: Freshman and Sophomore only.
- MUS 160 Musicianship II** 2.0 SH []
Sight-singing, melodic dictation, rhythmic studies, diatonic chord recognition, keyboard harmony. Students considering a B.A. Major in Music should complete Musicianship & Theory I and II (MUS 140 and MUS 160 & MUS 170) by the end of their sophomore year.
Prerequisite: MUS 140 (with a grade of C or higher).
Corequisite: MUS 170.
- MUS 165 Jazz Ensemble** 1.0 SH []
Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble, and improvisation techniques. Open to the entire community. May be taken more than once.
- MUS 170 Music Theory II** 3.0 SH []
A study of harmonic materials. Part-writing, tonal function, voice leading, harmonization of melody lines. Students considering a B.A. Major in Music should complete Musicianship & Theory I and II (MUS 140 and MUS 160 & MUS 170) by the end of their sophomore year.
Prerequisite: MUS 140 (with a grade of C or higher).
Corequisite: MUS 160.
- MUS 180 Instrumental Techniques** 3.0 SH []
Techniques, characteristics, and usage of brass, woodwind, and string instruments. Acquisition of playing ability on one instrument from each group.
- MUS 182 Choral Conducting** 2.0 SH []
Introduction to the basics of conducting choral music. Includes emphasis on conducting patterns, rehearsal pedagogy, vocal production, choral literature, score analysis, and choral performance practices.
- MUS 200 Topics in Music History** 3.0 SH [GEA]
A comprehensive study of a notable composer or topic of music history. The course serves to acquaint students with a significant body of music and its importance in music history. Includes historical context, analysis, and listening. The title will be extended to describe the current topic, e.g., Johannes Brahms, Women in Music, Charles-Marie Widor, Native American Music, Legendary Pianists. May be taken more than once provided the topics differ.
- MUS 201 Beethoven: The Great Master** 3.0 SH [GEA]
A survey of the life and music of Ludwig van Beethoven (1770-1827) including his symphonies, string quartets, piano music, chamber music, and "Fidelio." No music background is required.
- MUS 203 American Musical Theater** 3.0 SH [GEA]
An overview of the development of the modern American musical theater with emphasis on the music, lyrics, composers, writers, producers, directors, and the history and folklore of "Broadway." No musical background is required.
- MUS 204 The Jazz Tradition in America** 3.0 SH [GEA]
Explores the connection between jazz music and its cultural and social contexts. The heritage of the lives and music of jazz artists is discussed. Traces the legacy of jazz from its roots in African and American music to current styles. No musical background is required.

- MUS 205 The Creative World of Mozart** 3.0 SH [GEA]
A survey of the music of Wolfgang Amadeus Mozart (1756-1791). An exploration of the beauty, peace, grandeur, drama, and grace of Mozart's operas, symphonies, piano concertos, chamber music, and choral music. No musical background is required.
- MUS 206 Student Recital** 1.0-5.0 SH []
Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be taken for variable credit from one to five semester hours. May be taken more than once.
Prerequisite: demonstrated proficiency on instrument or voice.
- MUS 207 Popular Music in America** 3.0 SH [GEA]
A study of the popular music of America as the voice of the people in society and culture. The rich and varied styles of popular music are discussed in the context of the artists, recordings, and political events surrounding them. No musical background is required.
- MUS 209 Songs through Time** 3.0 SH [GEA]
Traces the development of solo song in Western culture. Includes discussion of the basic aspects of a song, important types of singing styles, and some famous singers. No musical background is required.
- MUS 212 Traditional Korean Music** 3.0 SH [GEA]
This course provides a moderately in-depth look at traditional Korean Music and its social and historical contexts. We will study traditional instruments, systems of notation, types of music (determined by their function) and their formal and stylistic differences and similarities, as well as the unifying ethos in the musical sensibilities expressed.
- MUS 213 Music of the World** 3.0 SH [GEA]
A selected survey of classical, popular, and folk music traditions from around the world. The role of music as ritual, mode of communication, and artistic expression is studied.
- MUS 225 Music Composition** 1.0 SH []
Study of the methods and techniques of music composition including historical, social, cultural, and aesthetic considerations. Emphasis on preparation for students who intend to do a capstone in music composition. May be taken more than once.
- MUS 227 Field Studies in Music** 3.0 SH [GEA]
Field study of materials covered in music courses such as MUS 100, MUS 101, and MUS 102. Offered only as part of an abroad or field study program.
- MUS 228 Great Composers & Their Culture** 3.0 SH [GEA]
This course includes a study of the great composers and their individual cultures that will be experienced on a music abroad. A specialized survey of music, history, art, and culture directly related to countries visited and composers studied.
- MUS 235 Advanced Recording** 3.0 SH []
Advanced study in music recording leading to a strong working knowledge of standard studio production practice. Microphone selection and placement, automation, critical listening skills, and session management will be discussed.
Prerequisite: MUS 112.
- MUS 250 College Choir** 1.0 SH []
Preparation and performance of choral literature focusing on concepts of style, ensemble, and vocal production. May be taken more than once. Open to the entire community.
- MUS 251 Chorus for Musical** 1.0-2.0 SH []
Preparation and performance of chorus parts for the musical production. By audition only. Offered only in semesters when there is a musical production. May be offered for variable credit from one to two semester hours. May be taken four times up to a total of eight semester hours.
- MUS 252 Principia Music Tour** 1.0-2.0 SH []
Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. A star (*) grade will be assigned until completion of the tour. May be offered for variable credit from one to two semester hours. May be taken more than once. Offered by invitation only.

MUS 261	Orchestra	1.0-2.0 SH	[]
Preparation and performance of instrumental literature focusing on style, expressive interpretation, and ensemble. May be offered for variable credit from one to two semester hours. May be taken more than once. Open to the entire community.			
MUS 265	Musicianship III	2.0 SH	[]
Continuation of MUS 160. Prerequisite: MUS 160 (with a grade of C or higher). Corequisite: MUS 275.			
MUS 266	Musicianship IV	2.0 SH	[]
Concentrates on practical musicianship, including harmonic and rhythmic exercises of increasing complexity. Literature from chant to 20th century, harmonic dictation, and intricate rhythms and keyboard skills are studied. Prerequisite: MUS 265 (with a grade of C or higher). Corequisite: MUS 302.			
MUS 271	Chamber Music for Credit	1.0-2.0 SH	[]
Small chamber ensemble, vocal or instrumental. May be offered for variable credit from one to two semester hours. May be taken more than once.			
MUS 275	Music Theory III	3.0 SH	[]
Analysis and exercises in common-practice harmony concentrating on advanced chromatic techniques and species counterpoint. Prerequisite: MUS 170 (with a grade of C or higher). Corequisite: MUS 265.			
MUS 281	Instrumental Conducting	2.0 SH	[]
Introduction to the basics of conducting instrumental music. Includes all essential beat patterns, expressive gestures, score-reading, learning of instrumental transpositions, and score reduction at the keyboard. May be taken four times up to a total of eight semester hours. Prerequisite: completion of piano proficiency requirement.			
MUS 284	Music Careers	3.0 SH	[]
A survey of music career opportunities such as entrepreneurial music business creation, freelancing, and nonprofits as well as the skills necessary for these activities. Topics covered include the entrepreneurial skills, community engagement, budgeting, negotiating and contracts, strategies, grant writing, and nonprofit organizations.			
MUS 302	Music Theory IV	3.0 SH	[]
Analysis and exercises in two-part counterpoint. Study of 20th century styles including set theory, atonality, dodecaphony, and minimalism. Prerequisite: MUS 275 (with a grade of C or higher). Corequisite: MUS 266.			
MUS 303	Junior Recital	1.0-5.0 SH	[]
Thirty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be offered for variable credit from one to five semester hours. May be taken more than once. Prerequisite: demonstrated proficiency on instrument or voice. Class Level Restriction: Junior only.			
MUS 305	Music Production Project	3.0 SH	[]
Supervised individual project in music production allowing students to pursue advanced applications in the area of music technology. The project will focus on the creation of a complete music work or portfolio of works that incorporate techniques such as recording, arranging, performing, and sound design. Projects of significant scope are expected. Prerequisite: MUS 112 and MUS 235 or MUS 335. Class Level Restriction: Junior and Senior only.			

- MUS 321 Music History I** 4.0 SH [GEA]
 A study of musical styles and forms of the Medieval, Renaissance, Baroque, and Classic periods with considerable emphasis on listening to the music from these periods.
Class Level Restriction: Sophomore and Junior and Senior only.
- MUS 322 Music History II** 4.0 SH [GEA]
 A study of musical styles and forms of the Romantic period through the present, with considerable emphasis on listening to music from these periods.
Class Level Restriction: Sophomore and Junior and Senior only.
- MUS 335 Advanced Music Production** 3.0 SH []
 Advanced study in standard studio practice in the areas of audio editing, MIDI sequencing, mixing, and mastering for albums and media. Focus is on post-production techniques in a music environment. Additional skills addressed include knowledge of hardware and software synthesizers, syncing to video, and integration of hardware and software studio techniques.
Prerequisite: MUS 112.
- MUS 391 Form and Analysis** 3.0 SH []
 In-depth analysis of compositions from the Middle Ages to the present. Development of analytical techniques to enable the student to approach a piece of music and discover the essence of its structure, melody, harmony, texture, and style.
Prerequisite: MUS 265 and MUS 275.
Class Level Restriction: Junior and Senior only.
- MUS 401 Senior Project: Composition** 4.0 SH []
 An original composition prepared for performance, demonstrating competency in compositional devices and understanding of formal and idiomatic considerations. A written analysis is also required. Will receive a star (*) grade until the semester in which the composition is performed. May be taken twice.
Corequisite: MUS 407.
Class Level Restriction: Junior and Senior only.
- MUS 402 SR Project: Music Research** 5.0 SH []
 Fifty-page research paper on a special topic in music history or ethnomusicology. Will receive a star (*) grade until the semester in which the project is completed. May be taken twice.
Class Level Restriction: Junior and Senior only.
- MUS 403 SR Project: Adv Performance** 4.0 SH []
 Sixty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Will receive a star (*) grade until the semester in which the recital is given. May be taken twice.
Corequisite: MUS 407.
Class Level Restriction: Junior and Senior only.
- MUS 404 Senior Project: Analysis** 5.0 SH []
 Analysis of a major work plus a paper presenting the analysis and placing the work in its historical and theoretical context. Will receive a star (*) grade until the semester in which the project is completed. May be taken twice.
Class Level Restriction: Junior and Senior only.
- MUS 405 SR Proj: Performance/Research** 5.0 SH []
 Thirty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles plus a 25-page research/analysis paper of the music performed. May be taken twice. Will receive a star (*) grade until the semester in which the recital is given.
Class Level Restriction: Junior and Senior only.
- MUS 407 Recital Program Notes** 1.0 SH []
 By writing program notes for the senior project, students learn how to use research and organizational skills to synthesize the knowledge gained during undergraduate study. Will receive star (*) grade until the term in which the project is completed. May be taken twice.
Corequisite: MUS 401, MUS 403 or MUS 408.
Class Level Restriction: Junior and Senior only.

MUS 408 SR Project: Music Recital 2.0,4.0 SH []

Thirty-minute (minimum) recital of instrumental or vocal music. May be taken twice up to a total of four semester hours. Will receive a star (*) grade until the semester in which the recital is given. Open only to students who double major in music and another area that also requires a capstone. Enrollment requires approval of the music faculty.

Prerequisite: demonstrated proficiency on instrument or voice.

Corequisite: MUS 407.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Music Majors only.

Philosophy (PHIL)**PHIL 120 Critical Thinking 3.0 SH []**

This course is an introduction to logic and basic argument. Students identify, analyze, evaluate, and construct basic arguments.

Class Level Restriction: Freshman and Sophomore only.

PHIL 150 Introduction to Philosophy 3.0 SH [GEH]

An introductory inquiry into the nature of philosophy, examining various branches of the discipline, typically including epistemology, aesthetics, metaphysics, ethics, and philosophy of mind. Attention is given to both classic and contemporary philosophers. Primary source readings form the base of the course.

Class Level Restriction: Freshman and Sophomore only.

PHIL 170 Film and Philosophy 3.0 SH [GEH]

This course is a survey of philosophical ideas as they appear in films and written texts. The course is not a philosophical study of film so much as it a study of philosophical ideas through film. Basic themes covered through film include but are not limited to ethics, free-will, metaphysics, and epistemology.

PHIL 220 Introduction to Ethics 3.0 SH [GEH]

An exploration of western moral philosophy, focusing on issues of moral duty, rights, and the nature of the good. The course offers a critical survey of traditional ethical theories and provides an introduction to contemporary responses.

PHIL 221 Topics in Philosophy 3.0 SH []

A seminar for lower division students on a topic of current philosophic interest. The title will be extended to describe the current topic. May be repeated up to a total of six semester hours provided the topics differ.

PHIL 222 Feminist Philosophy 3.0 SH []

This course explores the connections between traditional western philosophy and recent feminist discourse. Students consider ways in which feminists have criticized traditional philosophy and ask whether these criticisms are justifiable. Students examine ways in which feminist scholars have infused the discipline of philosophy with revisions or alternatives to philosophical thinking and evaluate the validity of these new insights.

PHIL 223 The Problem of Evil 3.0 SH []

This course traces a long-standing issue of human thought: the problem of evil. Students use several philosophers' work on the subject in conjunction with both historical and theoretical situations that have motivated the age-long human question: why do bad things happen to good people?.

PHIL 230 Philosophic Classics 3.0 SH []

An introduction to philosophy through the study of classic texts in philosophy.

PHIL 235 Philosophy and Race 3.0 SH []

Considers current philosophical thinking about race, ethnicity, identity, and culture. Examines the notion of race itself, and applies analytic and empathic skills to complex issues such as racial constructions, racial tensions, and public policies such as affirmative action.

- PHIL 240 Environmental Ethics** 3.0 SH []
 This course offers an introduction to environmental ethics. It provides an opportunity for students to learn about, discuss, and evaluate different attitudes and policies towards the natural world using the rigor and clarity of a philosophical framework.
- PHIL 250 Contemporary Moral Problems** 3.0 SH []
 Introductory study of various moral and social problems facing society today. Topics may include abortion, capital punishment, euthanasia, animal rights, racial inequities, sexual orientation, pornography, and cloning. Readings in applied ethics and the critiquing of arguments form the basis for the course.
- PHIL 252 Philosophy of Religion** 3.0 SH []
 A philosophical analysis of concepts, claims, and arguments that have traditionally been employed in support of and in challenge to religious belief. Topics typically include proofs for God's existence, the problem of evil, arguments against belief in God, and the possibility of life after death.
- PHIL 255 Global Ethics** 3.0 SH []
 Course focuses on ethics and moral problems both as they relate to the world community and from various standpoints within that community. Ethical traditions from Africa, Asia, Europe, and Latin America are considered. Intercultural moral conflicts are examined from a wide array of religious, cultural, and moral vantage points. More sensitivity, understanding, and assessment of needs are stressed.
- PHIL 260 Intro to Ancient Philosophy** 3.0 SH [GEH]
 An introduction to the history of philosophy focusing on ancient Greek thought. Students will read a selection of Pre-Socratic thinkers, several Platonic dialogues, and selections from Aristotle.
- PHIL 265 Business Ethics** 3.0 SH []
 This course focuses on major philosophical and ethical questions surrounding modern western business practices. Students receive a brief introduction to moral philosophy, become familiar with important literature in the field of business ethics, and begin to understand the place of morality in business.
- PHIL 270 Eastern Thought** 3.0 SH [GEH]
 This course looks at the value systems and metaphysical beliefs of the east and identifies philosophical themes that comprise Eastern Philosophy. We will cover metaphysical, cosmological, ethical, and epistemological topics from views found in cultural practices and religious belief systems. Students will analyze multiple viewpoints and critically evaluate arguments found in these traditions.
- PHIL 275 Aesthetics** 3.0 SH []
 Philosophical inquiry into the nature of art, the aesthetic experience, and aesthetic appreciation.
- PHIL 280 Classics of Political Thought** 3.0 SH []
 Exploration of the most important writings of authors who have had a profound impact on the West's conception of politics. The emphasis is on original texts by authors such as Plato, Aristotle, Hobbes, Rousseau, Machiavelli, and Marx. Also listed as POLS 280.
- PHIL 311 Ancient Philosophy** 3.0 SH []
 Philosophical ideas of the ancient and medieval worlds with emphasis on the Presocratics, Plato, and Aristotle.
Class Level Restriction: Junior and Senior only.
- PHIL 312 Modern Philosophy** 3.0 SH []
 Philosophical ideas from the modern period. Emphasized: rationalist and empiricist movements from 17th century Europe.
Class Level Restriction: Junior and Senior only.
- PHIL 313 Contemporary Philosophy** 3.0 SH []
 Philosophical ideas of the 19th and 20th centuries. Emphasized: idealist, existential, pragmatic, and analytical movements.
Class Level Restriction: Junior and Senior only.

PHIL 315 Ethics of Inequality 3.0 SH []

This is a course in social and political philosophy. It focuses on racial, gender, and economic inequalities and the moral duties we have in light of those inequalities. Other types of inequalities may be discussed as well. Various ethical standpoints will be considered and applied.

Prerequisite: PHIL 220 or PHIL 250 or PHIL 255.

Class Level Restriction: Junior and Senior only.

PHIL 320 Ethical Theory 3.0 SH []

This course in moral philosophy examines historical and contemporary ethical theories and their problems. Students study three classical theories (i.e., Aristotle's virtue ethics, Kant's deontology, and Mill's Utilitarianism) as well as more recent approaches concerning rights and justice (e.g., care ethics and discourse ethics).

Prerequisite: three semester hours in philosophy.

Class Level Restriction: Junior and Senior only.

PHIL 321 Epistemology 3.0 SH []

Exploration of classical and contemporary theories of knowledge and truth inclusive of theories of mind.

Class Level Restriction: Junior and Senior only.

PHIL 402 Advanced Topics in Philosophy 1.0-3.0 SH []

This course is an advanced seminar for upper division students on a topic of current philosophical interest. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be repeated up to a total of six semester hours provided the topics differ.

Prerequisite: PHIL 120.

Class Level Restriction: Junior and Senior only.

PHIL 421 Seminar in Philosophy 3.0 SH []

A seminar in a selected problem or topic in philosophy. Course content varies from year to year.

Research and writing techniques are developed. The title will be extended to describe the current topic.

May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

PHIL 440 Capstone in Philosophy 3.0 SH []

Independent reading, research, and writing on a topic of philosophical interest. The product is a high quality thesis paper demonstrating original thought, philosophical maturity, and depth. Required for the major.

Class Level Restriction: Junior and Senior only.

Physical Education: Academic Courses (PHED)**PHED 300 Lifeguard Training 2.0 SH []**

Following the American Red Cross program, this course is designed to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide care for a variety of emergency situations.

Prerequisite: 15 years of age and successful completion of a swimming skills test.

Corequisite: PE 061.

Fee=\$95.00.

Physical Education: Activity Courses (PE)**PE 015 Foil Fencing 0.0 SH [GEPE]**

An introduction to the skills and strategies of foil fencing as well as the rules, etiquette, and equipment.

PE 016 Ultimate Frisbee 0.0 SH [GEPE]

An introduction to the basic skills and strategies of ultimate frisbee. Covers rules, scoring, and vocabulary.

PE 022	Tennis	0.0 SH	[GEPE]
Students learn the basics of the game of tennis, its background, rules, strategies, strokes, terminology, and etiquette through short lectures, demonstration/instruction, and competition.			
PE 025	Foil Fencing II	0.0 SH	[GEPE]
Continuation of instruction in the sport of basic foil fencing. Additional instruction is given in technique and bouting.			
PE 026	Baseball Theory and Practice	0.0 SH	[GEPE]
Students learn the history, philosophy, and technique of America's favorite pastime. Students learn the historic and cultural perspective of the sport. The physical foundation of the game as well as the technical aspects of throwing, fielding, base running and hitting are also included. Students learn the language of the game: statistics, scoring, and nomenclature.			
PE 030	Squash: Beginning	0.0 SH	[GEPE]
An introduction to the basic skills and strategies of squash as well as vocabulary, rules, scoring, equipment, and etiquette.			
PE 031	Racquetball: Beginning	0.0 SH	[GEPE]
An introduction to the basic skills and strategies of racquetball as well as vocabulary, rules, scoring, equipment, and etiquette.			
PE 034	Fitness Through Weightlifting	0.0 SH	[GEPE]
Teaches the use of machines and free weights in development of an individual exercise program. Course is suitable for beginners as well as experienced lifters.			
PE 035	Circuit Training	0.0 SH	[GEPE]
Students engage in a variety of activities in order to develop aerobic strength. Students utilize the weight room in conjunction with medicine balls and isometric exercises.			
PE 036	Triathlon	0.0 SH	[GEPE]
Develops and tests the student's abilities in swimming, biking, and running. Includes conditioning and technical instruction in all three areas.			
PE 037	Fitness Exploration	0.0 SH	[GEPE]
Exposes students to a wide variety of lifetime physical activities. Includes conditioning and technical instruction.			
PE 038	Advanced Sports Training	0.0 SH	[GEPE]
Designed for students interested in learning and participating in a variety of training methods and modalities (i.e. plyometrics, balance, stability, bodyweight movement, weights/cables/medicine balls, physio-balls, etc.). Students engage in a circuit-style workout to enhance individual and group performance. Students also learn how to develop their own program based on their current activity level and future goals. This course is not for beginners.			
PE 039	Volleyball: Beginning	0.0 SH	[GEPE]
An introduction to the fundamental skills and techniques of power volleyball. Including present status, vocabulary, rules, scoring, and strategy.			
PE 040	Volleyball: Intermediate	0.0 SH	[GEPE]
Continuation of PE 039 at the intermediate level.			
PE 049	Ballroom Dance	0.0 SH	[GEPE]
This class is designed for students interested in learning ballroom dancing. The course will cover 4-6 different styles of dance and will include history, musicality, and technique.			
PE 051	Soccer	0.0 SH	[GEPE]
An introduction to the fundamental techniques and strategies, etiquette, vocabulary, and rules of soccer.			
PE 057	Fitness in Swimming	0.0 SH	[GEPE]
Fitness class designed for qualified students. Course for students who want to develop their fitness through lap swimming. Students swim a minimum of 1500 yards per week.			
Prerequisite: swimming ability intermediate or above.			

PE 061 Emergency Water Safety 0.0 SH [GEPE]

An aquatics course which introduces people to increased awareness of water-related safety issues and an understanding of how to respond in an aquatic emergency; includes practical and written activities.

Prerequisite: successful completion of American Red Cross Basic Water Safety or successful completion of a swimming skills test.

Corequisite: PHED 300.

PE 065 Swimming: Beginning 0.0 SH [GEPE]

Designed to meet the individual skill needs of non- and beginning swimmers. Students are required to participate in 42 hours of supervised swimming instruction.

PE 073 Rugby 0.0 SH [GEPE]

This course exposes students to the basic skills, strategies, and fundamentals of competitive rugby.

Students have the opportunity to compete against collegiate and club level teams sanctioned by USA Rugby and its affiliated unions.

PE 074 Lacrosse 0.0 SH [GEPE]

This course exposes students to the basic skills, strategies, and fundamentals of competitive lacrosse.

Students have the opportunity to compete against collegiate teams in the Central Plains Women's Lacrosse League of the Women's Division Intercollegiate Associates of US Lacrosse.

PE 075 eSports 0.0 SH []

eSports is a competitive online team game play in a variety of games. eSports provides a team environment for students to gain knowledge in teamwork, strategy, decision making, and overall character development through variety of competitive video games based in PC and console platforms.

PE 085 Hiking/Backpacking 0.0 SH [GEPE]

Designed to develop the skills and knowledge necessary to fully and safely enjoy hiking and/or backpacking. Offered periodically in association with off-campus programs.

PE 090 Trailrunning 0.0 SH [GEPE]

An introduction to running outside over various terrains and under various conditions.

Physical Education: Varsity Sports (PVAR)**PVAR 083 Varsity Cross Country 0.0 SH [GEPE]**

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 085 Varsity Volleyball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 086 Varsity Track and Field Indoor 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 087 Varsity Soccer 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 089 Varsity Basketball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 090 Varsity Swimming 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 091 Varsity Diving 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 093 Varsity Tennis 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 094 Varsity Track & Field Outdoor 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 095 Varsity Baseball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 096 Varsity Softball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 098 Varsity Beach Volleyball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness, and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership, and spirituality.

Physics (PHYS)**PHYS 121 Life in the Universe 4.0 SH [GESL]**

Survey course covering the basics of astrobiology. Topics include the conditions necessary to support life, terrestrial life in extreme environments, the possibilities for life in our solar system, planetary habitability, and the Drake Equation and Fermi Paradox. Includes a lab component. Math at the level of high school algebra may be expected, but is not a primary focus of the course.

PHYS 151 Descriptive Astronomy 4.0 SH [GESL]

Application of elementary scientific principles to the study of the universe. Includes laboratories and evening observation sessions using departmental telescopes. Math at the level of high school algebra and geometry may be expected.

Class Level Restriction: Freshman and Sophomore only.

- PHYS 161 Physics of Musical Sound** **4.0 SH** **[GESL]**
Principles and applications of sound for all students, musically inclined or not. Sources of sound, sound wave types and propagations, and aural perceptions of sound. Extensive examples of musical instruments and how they exhibit basic concepts of acoustics. Math at the level of high school algebra and geometry may be expected. Class includes one two-hour lab per week.
Class Level Restriction: Freshman and Sophomore only.
- PHYS 177 Environmental Physics** **3.0 SH** **[GESN]**
Physics governing the interaction between humanity and the environment; focuses on energy. Covers the basic physics of energy, methods of energy generation and use, and the relationship between environmental energy flows and climate. May include mathematics up to the level of high school algebra.
- PHYS 199 Physics for World Leaders** **3.0 SH** **[GESN]**
The physics behind policy, technology, and the everyday: energy sources, climate, electricity, nuclear weapons, etc. Energy is emphasized throughout. Science journalism is read and evaluated. A modest amount of math at the level of "Algebra I" is used.
- PHYS 201 Phys for Scientists/Engrs I** **4.0 SH** **[GESL]**
Introductory physics with calculus. Covers the major themes of physics, including mechanics, conservation laws, electricity, magnetism, waves, light, sound, relativity, early quantum theory, and thermodynamics. Laboratories approximately weekly. Emphasis on mechanics. Continues as PHYS 202, PHYS 203, and PHYS 204.
Prerequisite: Completion of or concurrent enrollment in MATH 181. CHEM 131 recommended.
- PHYS 202 Phys for Scientists/Engrs II** **4.0 SH** **[]**
Second term in the introductory physics sequence with calculus and laboratory; further emphasis on classical mechanics.
Prerequisite: PHYS 201 and completion of or concurrent enrollment in MATH 182.
- PHYS 203 Phys for Scientists/Engrs III** **4.0 SH** **[]**
Third term in the introductory physics sequence with calculus and laboratory; emphasis on electricity and magnetism.
Prerequisite: MATH 182 and PHYS 201.
- PHYS 204 Phys for Scientists/Engrs IV** **3.0 SH** **[]**
Fourth term in the introductory physics sequence with calculus; emphasis on optics and thermodynamics. Does not include a laboratory component.
Prerequisite: PHYS 202 and PHYS 203.
- PHYS 231 Introduction to Cosmology** **3.0 SH** **[GESN]**
The course focuses on the study of the universe as a whole. Topics include general relativity, the expansion of space, the distribution of galaxies, black holes, and the origin and fate of the universe. The emphasis is on conceptual understanding; however, math at the level of high school algebra and trigonometry is utilized.
- PHYS 283 Advanced Laboratory** **4.0 SH** **[]**
Laboratory requirement for physics majors. Experiments in acoustics, optics, electrical measurement, spectroscopy, nuclear physics, and gravitation. Emphasis on techniques of measurement.
Prerequisite: PHYS 203.
- PHYS 301 Classical Mechanics** **3.0 SH** **[]**
Advanced course in analytic mechanics, including analysis of systems of forces, acceleration, momentum, and energy. Emphasis on dynamics, including space and orbital mechanics. Full use is made of differential equations and vector analysis wherever appropriate.
Prerequisite: PHYS 203 and MATH 283; MATH 380 strongly recommended. Offered in alternate years.
Class Level Restriction: Junior and Senior only.

- PHYS 303 Electricity & Magnetism I** **3.0 SH** []
 Advanced course in electricity and magnetism, including electro-statics, magnetic induction, magnetostatics, and electromagnetic waves. Basic laws of Gauss, Ampere, Faraday, and Maxwell in their differential form. Vector analysis and differential equations are used throughout. Emphasis on solving boundary value problems, such as those appropriate to fields at interfaces between two media.
Prerequisite: PHYS 203 and MATH 283; MATH 355 and MATH 380 strongly recommended. Offered in even years.
Class Level Restriction: Junior and Senior only.
- PHYS 304 Electricity & Magnetism II** **3.0 SH** []
 Continuation of PHYS 303. Applications in astrophysics and ham radio will be included. Offered in even years.
Prerequisite: PHYS 303.
Class Level Restriction: Junior and Senior only.
- PHYS 305 Quantum Mechanics I** **3.0 SH** []
 A first year course in quantum mechanics. Topics may include wave functions, barrier potentials, harmonic oscillator, quantized angular momentum, hydrogen atom, perturbation theory, atoms and identical particles. Applications chosen from astrophysics, statistical mechanics, solid state physics, atomic physics, molecular physics, particle physics and nuclear physics.
Prerequisite: PHYS 203 and MATH 182.
Class Level Restriction: Junior and Senior only.
- PHYS 306 Quantum Mechanics II** **3.0 SH** []
 Continuation of PHYS 305.
Prerequisite: PHYS 305.
Class Level Restriction: Junior and Senior only.
- PHYS 307 Statistical Mechanics** **3.0 SH** []
 A study of the application of classical and quantum mechanics to many-bodied systems. Explores the relationship between statistical mechanics and modern thermodynamics, fluid mechanics, solid state physics, and plasma physics. This course will develop the basic equations and concepts of statistical mechanics. Both classical and quantum distribution functions will be used to calculate the macroscopic properties of a system based on the detailed behavior of the microsystem.
Prerequisite: MATH 283, PHYS 203, PHYS 204.
Class Level Restriction: Junior and Senior only.
- PHYS 351 Astrophysics** **3.0 SH** []
 Advanced course applying the laws of physics to astronomical phenomena. Star formation and evolution, formation of planetary systems, large-scale evolution, and eventual fate of the universe will be covered.
Prerequisite: MATH 283, PHYS 203.
Class Level Restriction: Junior and Senior only.
- PHYS 352 Computational Physics** **3.0 SH** []
 Application of computer modeling to complex physical systems. Subjects include numerical integration, the Monte Carlo method, genetic and simulated annealing algorithms, chaotic systems, fluid flow, and gravitational scattering. Of special interest to computer science students.
Prerequisite: CSCI 171, MATH 283, PHYS 203.
Class Level Restriction: Junior and Senior only.
- PHYS 391 Vehicular Dynamics** **3.0 SH** []
 Advanced survey of the physical principles underlying the design and performance of automobiles. Topics include driving kinematics, aerodynamics, load transfer, and engine thermodynamics. Calculus-level mathematics should be expected. Does not include field program.
Prerequisite: PHYS 202.
Class Level Restriction: Junior and Senior only.

PHYS 392 Vehicular Dynamics with IFE 4.0 SH []

Advanced survey of the physical principles underlying the design and performance of automobiles. Topics include driving kinematics, aerodynamics, load transfer, and engine thermodynamics. Calculus-level mathematics should be expected. Includes an international field program in a country with a rich automotive tradition.

Prerequisite: PHYS 202.

Class Level Restriction: Junior and Senior only.

PHYS 401 Research 1.0-6.0 SH []

Experimental or theoretical research under faculty supervision. May receive a star (*) grade, with final grade being assigned upon completion of the project. May be offered for variable credit from one to six semester hours. May be repeated multiple times, but only six semester hours may be used to fulfill major or minor requirements.

Class Level Restriction: Junior and Senior only.

Political Science (POLS)**POLS 020 Model Illinois Government 0.0 SH []**

Model Illinois Government is the annual intercollegiate simulation of the Illinois General Assembly, held each winter in the State Capitol. Students serve as the various elected officers of the executive and legislative branches of the state government.

POLS 021 Moot Court (Model IL Govt) 0.0 SH []

Teams of students prepare and argue appellate cases before mock state or U.S. Supreme Courts in the annual collegiate judicial simulations at state or national levels.

POLS 052 Model United Nations 0.0 SH []

Students simulate the actions of the various bodies of the United Nations - the General Assembly, the Security Council, the Economic and Social Council - in annual intercollegiate competition.

POLS 111 Intro to Political Behavior 3.0 SH [GESS]

Course considers how U.S. citizens form values, beliefs, and preferences toward politics and public policies. Sources of knowledge explored include family, the media, and political elites. The impact of participatory and deliberative processes that may contribute to or detract from tolerance of others is also examined. Specific attention is devoted to political ramifications of attitudes concerning race, ethnicity, and gender.

Class Level Restriction: Freshman only.

POLS 120 American Government & Politics 3.0 SH [GESS]

Study of the American political system and formation of public policy, primarily at the national level: political culture, constitutions and constitutionalism, democratic theory, federalism, public opinion, interest groups, political parties, the electoral system, Congress, the presidency, and the judicial system.

POLS 125 Moot Court: Reason & Argument 2.0 SH []

Students prepare legal briefs and argue appellate cases before mock Illinois or U.S. Supreme Court in the intercollegiate judicial simulations at state or national levels. Students learn legal reasoning and analysis, learn to think under intense pressure, and develop oral argumentation skills.

Prerequisite: POLS 120.

POLS 152 Politics Among Nations 3.0 SH [GESS]

Introduction to international politics, with emphasis on what causes conflict between nations, why nations cooperate, and how contemporary forces influence international politics.

Class Level Restriction: Freshman and Sophomore only.

POLS 215 Soc Science Research Methods 4.0 SH <GEM> [GESS]

Explores qualitative and quantitative research methods used in the social sciences. Students conduct social science research projects to learn various research designs, their strengths and weaknesses, and their applications. Students collect, analyze, and interpret data, as well as test hypotheses and develop theories. Also listed as SOAN 215.

- POLS 220 American Parties & Elections 4.0 SH [GESS]**
 Theoretical study of political parties, elections, and public opinion, supplemented with case studies, guest speakers, and field research. Students attend political rallies and conduct surveys. Taught in election years. (A student may receive credit for only one of the courses POLS 220 and POLS 221.).
- POLS 221 Presidential Elections 3.0 SH [GESS]**
 Examination of modern U.S. presidential election laws and processes that influence candidate and voter behavior. Specific topics include: primary elections and nominations, campaign finance law, voter turnout, debates, the Electoral College, media coverage, and the role of political parties. (A student may receive credit for only one of the courses POLS 220 and POLS 221.).
- POLS 231 American Congress 3.0 SH [GESS]**
 Study of the representational nature, institutional structures, and deliberative processes of the United States Congress. Topics addressed include member goals and political resources, party organizations, the committee structures, legislative rules and procedures, and interbranch relations.
- POLS 232 American Presidency 3.0 SH [GESS]**
 Study of the constitutional and prerogative powers, institutional arrangements, public dimensions, and policy-making roles of the modern presidency. The institution's relationships with the legislative and judicial branches as well as the federal bureaucracy are considered along with the impact individual presidents make on the exercise of power and authority.
- POLS 240 Women in Politics 3.0 SH [GESS]**
 Examination of the experience of women in U.S. politics, particularly at the federal and state level. Considers the impact of gender on political participation, political attitudes, policy preferences, voting behavior, campaign styles, and institutional norms.
- POLS 252 U.S. Foreign Policy 3.0 SH [GESS]**
 Values, process, and governmental institutions involved in the formulation of American foreign policy. In-depth analysis of American foreign policy since 1945 dealing with Cold War and post-Cold War challenges, the developing nations, and international organizations including the United Nations.
- POLS 254 Latin American Politics 3.0 SH []**
 Study of the historical, economic, and social forces influencing the politics of contemporary Latin America, with a focus on why countries shift from authoritarianism into democracy, and how to assess the consolidation of democracy.
- POLS 255 Contemporary European Politics 3.0 SH [GESS]**
 Comparative survey of the political process and issues in Britain, France, and Germany: organization of political interests, decision-making processes, governmental bureaucracies, and political responses to social and economic change.
- POLS 261 Politics of China 3.0 SH [GESS]**
 Study of the cultural, historical, and ideological origins of the People's Republic of China, the role of the Chinese Communist Party and its leaders, the structure and processes of its political institutions, and the nature of issues facing contemporary China, from rapid economic growth to human rights.
- POLS 263 Topics in Asian Politics 3.0 SH []**
 Focuses on government, politics, and public policies of one or more countries in Asia. Designed to deepen the student's work in political science, international relations, or Asian studies. Specific topics vary, from Southwest Asia to the Vietnam War to the politics of Japan. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- POLS 264 Russia and the FSU 3.0 SH [GESS]**
 Study of the cultural and historical origins of post-Soviet Russia and the various former Soviet republics, the person and rule of Vladimir Putin, the structure and processes of Russia's political institutions, and the nature of issues facing contemporary Russia, from reassertion of a global presence to the decline of democratic institutions.

- POLS 265 Contemporary Issues** 3.0 SH []
 Focuses on one or more current political issues. Designed to deepen the student's previous political studies. May focus on either domestic or international topics. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- POLS 271 Middle Eastern Politics** 3.0 SH []
 Study of the historical, economic, and social forces influencing the contemporary politics of the Middle East, including culture, religion, resources, state formation and development, security, regional/foreign relations, and competing interests. Focused on the most politically-significant countries and issues.
- POLS 280 Classics of Political Thought** 3.0 SH []
 Exploration of the most important writings of authors who have had a profound impact on the West's conception of politics. The emphasis is on original texts by authors such as Plato, Aristotle, Hobbes, Rousseau, Machiavelli, and Marx. Also listed as PHIL 280.
- POLS 300 Rev:Politics of Violent Change** 3.0 SH [GESS]
 Study of violent political change: its causes, frequency, varieties, process. Various revolutions and their leaders considered at length, including the classic revolutions (English, American, French, Bolshevik), Mao Zedong's Chinese Revolution, Che Guevara in Latin America, and Eastern Europe in the post-cold war era.
Class Level Restriction: Junior and Senior only.
- POLS 311 Political Behavior** 3.0 SH []
 Seminar examines the nature of both political socialization and political participation of United States citizens. Influences on socialization studied include family, education, socioeconomic status, political elites and the media. Forms of participation include voting and membership in both interest groups and voluntary civic organizations.
Prerequisite: POLS 120.
Class Level Restriction: Junior and Senior only.
- POLS 325 The Legal Process** 4.0 SH []
 How the nature of law, including its history, development, and efficient administration, affects our political system. Modern American legal system is studied with the idea of understanding law as ongoing process - how the process works and its political ramifications. Useful for students considering law school.
Class Level Restriction: Junior and Senior only.
- POLS 330 American Constitutional Law** 3.0 SH []
 Study of the politics and law of the U.S. Supreme Court. Selected Supreme Court cases are analyzed to show how court decisions shape the American constitutional system of government. Useful for students considering law school.
Class Level Restriction: Junior and Senior only.
- POLS 332 Presidential Leadership** 3.0 SH []
 Seminar examines personal, public, constitutional and institutional sources of power modern presidents utilize in their attempts to lead their various constituencies - the public, the legislative branch, and the federal bureaucracy. In addition to the critical analysis of various models of modern presidential leadership, students also conduct case studies of presidential leadership during the modern presidency (1945-present).
Prerequisite: POLS 120.
Class Level Restriction: Junior and Senior only.
- POLS 340 Public Policy Analysis** 4.0 SH []
 Survey of the policy process (agenda setting, adoption, implementation, and evaluation) and conceptual approaches to policy analysis. Seminar addresses specific policy topics and broader theoretical concerns.
Prerequisite: POLS 120 and POLS 215.
Class Level Restriction: Junior and Senior only.

POLS 348 U.S. and Global Security 3.0 SH []

Explores traditional and non-traditional threats in a globalized world and the options for response; how the concept of security is evolving to take into account global technological, social, and political developments; the role of the military in U.S. political culture.

Prerequisite: POLS 152.

Class Level Restriction: Junior and Senior only.

POLS 352 International Relations Theory 3.0 SH []

Advanced study of the means and methods of theory construction in the field of international relations.

Prerequisite: POLS 152.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Political Science Majors only.

POLS 354 Globalization: Theory/Practice 3.0 SH []

Explores globalization and its many facets from both practical and theoretical viewpoints, including the processes and institutions that cause and advance globalization; evaluating the utility of current theories to explain globalization; debating the effects of globalization.

Class Level Restriction: Junior and Senior only.

POLS 365 Advanced Issues 3.0 SH []

Advanced study and analysis of one or more current political issues. Designed to deepen the advanced student's previous political studies. May focus on domestic or international topics. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

Class Level Restriction: Junior and Senior only.

Religious Studies (RELS)

RELS 110 The Old Testament 3.0 SH [GEB]

Introduction to the Hebrew Scriptures as history, as literature, and as a statement of faith. God's covenant with Israel forms a unifying motif, seen against the background of the ancient Near East. A brief overview of the New Testament is also included.

RELS 120 The New Testament 3.0 SH [GEB]

An introductory overview of the historical context, literary genres, and theological and ethical messages of the New Testament, with focus on its contemporary relevance, the identity of Jesus, and what it means to be his follower. A brief overview of the Old Testament is also included.

RELS 130 World Religions 3.0 SH [GEH]

An introduction to the world's religious traditions, including the three Abrahamic faiths (Judaism, Christianity, Islam), Hinduism, Buddhism, Daoism, and other traditions at the discretion of the instructor. This course provides an opportunity to learn about the diversity of religious practice in the world and prepares students for a world impacted by religion at every level.

RELS 140 Religion in Unexpected Places 3.0 SH [GEH]

The course will ask students to consider how individual religious convictions can impact self and society. Students will identify the creative, ethical, and theological thinking of varied texts and consider how a moral imagination can help them to focus both their own religious beliefs and practices and empower them to be agents of change.

Class Level Restriction: Freshman and Sophomore only.

RELS 215 The Hebrew Prophets 3.0 SH [GEH]

Prophecy as a quest for leadership and as insight into social and moral conditions in Israel before, during, and after the exile.

RELS 218 Wisdom Literature and Psalms 3.0 SH [GEH]

Close reading of Psalms, Proverbs, Job, and Ecclesiastes, with reference to wisdom traditions of the ancient Near East.

- RELS 222 The Bible and the Environment** 3.0 SH [GEH]
 This course critically examines and interprets relevant biblical texts within the context of the current ecological crisis with the intent of articulating a biblical case that responds to the challenge to live faithfully and responsibly as stewards of the Earth and its resources.
- RELS 224 Christian Gospels** 3.0 SH [GEH]
 An examination of the origins and development of Christian gospels in and outside the New Testament canon, as historical, literary, and theological products of the early Church, and of their contemporary interpretations.
- RELS 227 Paul the Apostle** 3.0 SH [GEH]
 An exploration of the life, letters, thought and impact of the prolific and controversial apostle. The book of Acts, Paul's letters and those attributed to him, are examined in order to better understand both the man and the message.
- RELS 230 Faith and Film** 3.0 SH [GEH]
 Students will develop evaluative and critical skills for use in their encounter with the medium of film. These skills will be applied both to films with explicitly religious and spiritual themes, as well as to films in which such themes are more hidden and implicit. Students view, discuss, review, and research a variety of popular films.
- RELS 231 History of Christianity** 3.0 SH [GEH]
 An exploration of the Christian churches from their beginnings in the apostolic period to their most recent expressions in the twenty-first century. The course considers how Christianity has shaped societies and how societies have shaped Christianity. Major movements, leading figures, theological developments, and religious trends will be examined to better understand the global spectrum of Christian expressions.
- RELS 240 Introduction to Islam** 3.0 SH [GEH]
 The study of Islam as a religion, focusing on the Quran, the prophet Muhammad, ritual, commentary, dissent, and important religious themes and developments during three periods: Middle (650-850 CE); Mature (850-1500 CE); and Modern (1600-present).
- RELS 260 Religion in America** 3.0 SH [GEH]
 An historical survey of religious groups and movements that shaped and were shaped by the American experience.
- RELS 265 Comparative Religious Ecology** 3.0 SH [GEH]
 This course addresses how various religious traditions understand the relationship between humanity, ecology, and the divine. Monotheistic, dharmic (such as Buddhism), and indigenous traditions will be addressed. The course also covers religiously informed environmental movements.
- RELS 270 Gender & Religion** 3.0 SH [GEH]
 This course examines underlying assumptions about gender roles in the context of scripture and religious practice. It explores historical, cultural, and religious expectations about men's and women's attitudes and interests, and how those appear in scriptures and in various religious traditions. The title will be extended to describe the current topic. May be taken two times provided the topics differ.
- RELS 275 Christian Science Movement** 3.0 SH [GEH]
 This course allows students to engage in in-depth study of specific aspects of the history and/or cultural practice of Christian Science at various times and places. May be repeated once provided the topics differ.
- RELS 300 Biblical Interpretation** 3.0 SH []
 An analysis and practicum of the methods scholars and others have used to interpret biblical literature, from antiquity to the present.
Prerequisite: RELS 110 or RELS 120.
Class Level Restriction: Junior and Senior only.

RELS 304 Topics in Biblical Studies 1.0-3.0 SH []

A seminar on a topic in biblical studies at the advanced level. The content varies, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be repeated up to a total of nine semester hours provided the topics differ.

Prerequisite: RELS 110 or RELS 120.

Class Level Restriction: Junior and Senior only.

RELS 307 Spiritual Autobiographies 3.0 SH [GEH]

In this course we will explore classic and contemporary spiritual autobiographies and learn about the practices of faith that sustained and challenged diverse religious people. Students study texts from different cultures and historical periods, discovering how historical and cultural context shapes faith. Through critical examination of the texts, students will reflect on their own spiritual journeys and identities.

Class Level Restriction: Sophomore and Junior and Senior only.

RELS 310 Topics in Religious Studies 1.0-3.0 SH []

A seminar on a topic in religious studies at the advanced level. The content varies, and the title will be extended to describe the current topic. Topic areas include comparative religions, history of religions, philosophy and ethics of religions, and religion in society. May be repeated up to a total of nine semester hours provided the topics differ.

Prerequisite: at least one RELS course.

RELS 320 Biblical Sites and (Con)texts 3.0 SH [GEH]

An examination of biblical sites in light of pertinent biblical texts as well as their ancient and contemporary contexts. This course includes critical analyses of land in the Bible and of biblical sites in Judaism, Christianity, and Islam. Secondly, this course addresses the role of these concepts in conflicts in the land of the Bible from antiquity to the present.

RELS 332 The Life of Mary Baker Eddy 3.0 SH [GEH]

An historical survey of the life and times of Mary Baker Eddy, from her childhood through her work as Discoverer, Founder, and Leader of Christian Science.

RELS 365 God and the Holocaust 3.0 SH [GEH]

This course helps students understand the historical background, context, events, and aftermath of the Holocaust. We will also be addressing the implications and repercussions of the Holocaust on religious practice and theology. Finally, the course is intended to encourage students independently to develop their own prayerful response to examples of violence and evil.

Class Level Restriction: Sophomore and Junior and Senior only.

RELS 370 Jews, Christians, & Muslims 3.0 SH [GEH]

Judaism, Christianity, and Islam sometimes interact harmoniously, but at other periods have fought bitterly. This course compares these religions theologically, legally, and culturally; traces the history of the interactions among these religions; and also examines contemporary relations between these three religions.

RELS 390 Seminar in Religious Studies 3.0 SH []

This course provides students with an understanding of the methodological tools used in the study of religion; it also gives students the opportunity to reflect upon which of those methods will be most helpful to them in undertaking a specific research project in which religion is a significant category of analysis.

Prerequisite: RELS 110 or RELS 120 and two RELS courses numbered 200 or above.

Class Level Restriction: Junior and Senior only.

RELS 401 Capstone Project 1.0-3.0 SH []

A selected topic, area, or problem providing opportunity for survey, investigation, research, creative activity, or approved travel-study. May be offered for variable credit from one to three semester hours. May be taken three times up to a total of six semester hours. May be offered on an independent contract basis.

Class Level Restriction: Junior and Senior only.

Russian (RUSS)

RUSS 104 Elementary Russian I **5.0 SH** []

In this first semester of the two-semester elementary sequence students learn from video, CD exercises, and classroom activity, how to listen and speak, read and write, and understand Russian sentences in the present tense. This course includes an introduction to Russian culture through video and texts.

Class Level Restriction: Freshman and Sophomore only.

RUSS 105 Elementary Russian II **5.0 SH** [GE2L]

In this second course of the two-semester elementary language sequence, students fulfill the general education second language requirement. Students understand and speak, read, and write sentences and paragraphs in the present, future, and past tenses in order to function in everyday situations in Russian-speaking countries. This course includes an introduction to Russian culture through video and texts.

Prerequisite: RUSS 104.

RUSS 136 Language and Culture Abroad II **3.0 SH** [GE2L]

Elementary Russian language/culture study during a Russian Study Abroad Program.

Prerequisite: RUSS 104 or placement.

Science (SCI)

SCI 360 Current Science Literature **1.0 SH** []

Introduction to the current scientific literature in field(s) of students' choice. Initial readings are selected by faculty. Students present findings orally. Readings are selected from peer-reviewed scientific journals, e.g. *Physical Review*, *Journal of Geophysical Research*, etc. May be taken four times up to a total of four semester hours.

Sociology and Anthropology (SOAN)

SOAN 050 Community Service Program **0.0 SH** []

In local, national, and international communities, with agencies, and institutions, students work together with others committed to meeting social needs. Students are encouraged to learn from those they serve, broaden their knowledge of diversity, develop social responsibility and realize their obligation to serve our global community.

SOAN 100 Intro to Global Sociology **3.0 SH** [GESS]

An introduction to the basics of sociology as a way of understanding the world. This course is designed to provide a general introduction to the discipline of sociology. Although a domestic (US) sociological perspective is examined, a global sociological perspective is at the core of the course. Students will be introduced to the field by focusing on key sociological topics, including but not limited to social theory, the social construction of knowledge, socialization, social stratification, "race" and ethnicity, gender, culture, geography, religion, global social movements, globalization, global stratification, post-colonialism, and global ecology.

Class Level Restriction: Freshman and Sophomore only.

SOAN 130 Introduction to Archaeology **3.0 SH** [GESS]

A survey course which explores theory, methods, and techniques for investigating, reconstructing, interpreting, preserving, and learning about human behavior in the past. It reviews human cultural chronology from the earliest Paleolithic ages, to the present, and examines the artifact remains. Throughout the course archaeology as anthropology and the relevance of archaeology to modern society and politics is emphasized.

Class Level Restriction: Freshman and Sophomore only.

SOAN 150 Intro to Cultural Anthropology **3.0 SH** [GESS]

Introduction to the field of cultural anthropology. Explores various cultures around the world using some or all of the following as a basis of comparison: gender roles, language, social structure, family and kinship, identity, and spirituality. Also examines how cultures have been impacted by globalization.

Class Level Restriction: Freshman and Sophomore only.

- SOAN 160 "Race" and Ethnicity** 3.0 SH [GESS]
Examines the Native, African, Latino/Latina, Asian, and European American experience. Also, provides a critical and comparative analysis of racial ideology and the social construction of "race," its origins and present day consequences from a global perspective. Ethnicity, ethnic conflict, genocide, and conflict solutions are examined as well.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 170 Gender Paradigms** 3.0 SH [GESS]
Examines underlying assumptions about male and female roles throughout history, then focuses on contemporary issues. Addresses the questions of why status differences exist between the sexes, how people are socialized into stereotyped sex roles, and how individuals can move beyond limitations imposed by prescribed sex roles. Also listed as WOM 170.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 180 Social Stratification** 3.0 SH [GESS]
Explores some of the fundamental concepts and major theoretical issues involving social class and power at a global level. Topics include socio-economic inequality, class consciousness, power and privilege, social mobility, and the place of race and gender.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 200 Criminology and Criminal Law** 3.0 SH [GESS]
Explores criminological theories, the criminal judicial system, and the consequences of crime in the United States and around the world. Typologies and case studies of crimes include, but are not limited to contemporary, historical, celebrity, corporate, crimes against humanity, and "terrorism".
- SOAN 215 Soc Science Research Methods** 4.0 SH <GEM> [GESS]
Explores qualitative and quantitative research methods used in the social sciences. Students conduct social research projects to learn various research designs, their strengths and weaknesses, and their applications. Students collect, analyze, and interpret data, as well as test hypotheses and develop theories. Also listed as POLS 215.
- SOAN 230 Archaeological Field Studies** 3.0 SH [GESS]
This course is an on-site, practical program in the methods and techniques of archaeological excavation and interpretation. In this course students will learn archaeological field skills including survey, mapping, excavation, classification, and recording of features and artifacts. Students will learn to identify features in the ground and in the landscape and to use a variety of precision surveying equipment.
- SOAN 235 Environmental & Social Change** 3.0 SH [GESS]
Examines the interface between social and environmental problems plus strategies to resolve such problems. Analyzes the impact of industrialization and globalization on humanity and ecosystems in traditional and more industrialized societies. Evaluates the feasibility of ecologically, economically, and socially sustainable rural and urban human settlement patterns.
- SOAN 240 Native American Cultures** 3.0 SH [GESS]
Develops an appreciation for Native North American cultures from a sociological and historical perspective. Examines common issues facing many Native Americans as they work to maintain their cultural practices and ways of knowing in the midst of a dominant Euro-American society. Explores contemporary political, socio-economic, and resource management issues related to ecological, economic, and social sustainability.
- SOAN 244 Int'l Human Rights Law & Advcy** 3.0 SH [GESS]
This course examines the global mechanisms, forces, and laws for promoting and protecting human rights; rights implementation via issues of evidence, ethics, and socio-political feasibility; legal concepts that apply to torture, political repression, war crimes and genocide, women's rights, children's rights, and violations of non-human rights; advocacy on behalf of those oppressed by violations of human and non-human rights law.
Class Level Restriction: Junior and Senior only.

- SOAN 245 Studies in Culture** 1.0-3.0 SH []
 Analysis of selected cultures. The contents will vary, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
- SOAN 250 African American Cultural Hist** 3.0 SH [GESS]
 An historical and cultural exploration of the African American experience from African antiquity to the present.
- SOAN 251 Anthropology of India** 3.0 SH [GESS]
 A survey of contemporary India that examines the society through an anthropological lens. Explores the lived experiences of socio-economic class, caste, gender roles, marriage, family life, religion, politics, and globalization in the context of both rural and urban India. Uses India as a starting point from which to discuss questions pertaining to understanding cultural difference.
- SOAN 255 The Anthropology of Religion** 3.0 SH [GESS]
 In this course we will examine the theory and methods available to anthropologists to understand ancient and indigenous religions that do not have a written record. Starting with the social and anthropological theory used to interpret religions, we will then examine the religions of Native American and other indigenous peoples to try and understand the commonalities and differences between them.
- SOAN 265 Food in Society** 3.0 SH [GESS]
 The course will demonstrate how the political economy of the food system has emerged as a significant area of sociological/anthropological research and become essential to the study of sustainability. Drawing on interdisciplinary sources, this course explores the consequences raised by the relation of food and food consumption to inequality, diet, and food as a cultural symbol.
Class Level Restriction: Junior and Senior only.
- SOAN 270 Indigenous Cultures** 3.0 SH [GESS]
 Explores practices of indigenous peoples around the world and uses the lens of globalization to examine present day issues. Examines the process of "modernization" and its effects on the role of the state and cultural preservation. Explores the role of indigenous peoples' values and knowledge related to resource management and environmental sustainability as well as cultural preservation.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 280 Global Urban Studies** 3.0 SH []
 This course examines urban areas (cities) in a global context and is divided into four parts: global cities defined, living in cities, the health of cities, and the future of cities. Primary emphasis will be placed on analysis of "slums" and "ghettos" as well as the sustainable cities global movement.
Class Level Restriction: Sophomore and Junior and Senior only.
- SOAN 290 African Cultures** 3.0 SH [GESS]
 A cultural view of Africa which studies the impact of colonialism and imperialism on contemporary African societies. In addition, the cultural influences of African liberation movements on the values and behavior of selected traditional peoples are analyzed.
Class Level Restriction: Junior and Senior only.
- SOAN 300 Social Theory** 3.0 SH []
 Comparative historical study of ideas of individuals who have contributed significantly to the development of social and cultural thought globally. Includes classical and contemporary theorists. Also focuses on explanatory value of race, ethnicity, gender, social class, and culture theories.
Class Level Restriction: Junior and Senior only.

- SOAN 323 Refugees: Culture and Conflict** 3.0 SH []
 This course looks at refugee groups around the world along with governmental and non-governmental organizations that service refugees. Explores the kinds of conflicts leading ethnic groups to become refugees; the options for resettlement for refugee groups; the issues related to resettlement; as well as how refugee groups adapt culturally to their new surroundings during the resettlement process; how "race," class, and gender impact both how refugees experience conflict and their integration into new communities. This course is intended to be a service learning course in that students are encouraged to enroll in the SOAN 050 community service at the International Institute.
Class Level Restriction: Junior and Senior only.
- SOAN 325 Youth Advocacy Services** 3.0 SH []
 Covers a wide range of youth and family issues in the USA and abroad, including child abuse and neglect, adoption and foster care, special needs children, families and children, and child welfare practices. Private and government efforts to respond to these issues are explored and evaluated.
Class Level Restriction: Junior and Senior only.
- SOAN 330 Social Field Work Methods** 4.0 SH []
 Designed for students considering human service, social work, or alternative education as a profession. Students learn about the social work profession and various social service systems. Students learn how to identify problems necessitating social work services and then devote time to skill development in interviewing, counseling, observing, and case work.
Prerequisite: Two of the following: SOAN 160, SOAN/WOM 170, SOAN 180.
Class Level Restriction: Junior and Senior only.
- SOAN 335 Gender & Masculinity** 3.0 SH []
 This course examines the social construct of masculinity. What does it mean to be a male in contemporary American society? How does this compare with notions of manhood in other cultures and in other time periods? Readings include representative selections of the diverse literature on men and theories of masculinity. Also listed as WOM 335.
Prerequisite: SOAN/WOM 170.
Class Level Restriction: Junior and Senior only.
- SOAN 340 Peace and Conflict** 3.0 SH [GESS]
 Traces the creation, causes and consequences of war, war tipping points, jus bellum iustum (just war theory) and bellum avertio (aversion of war) paradigms. Explores interpersonal, inter-group and international conflict, and resolution. Exposes students to cutting edge critical thinking around issues of violence and non-violent advocacy within the sociological framework of peace, war and social conflict.
Class Level Restriction: Junior and Senior only.
- SOAN 345 Advanced Studies in Culture** 1.0-3.0 SH []
 Advanced analysis of cultures. The contents vary, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- SOAN 360 Gender Theories** 3.0 SH []
 Attempts to answer the questions of how and why gender oppression and discrimination occur. Covers a variety of theoretical perspectives and focuses on solutions for ending aggression and oppression. Also listed as WOM 360.
Prerequisite: SOAN/WOM 170.
Class Level Restriction: Junior and Senior only.
- SOAN 365 Global Perspectives of Women** 3.0 SH []
 An in-depth study of the critical areas of concern for women's empowerment around the world. The course includes theoretical critiques of women's movements and methodologies. Also listed as WOM 365.
Class Level Restriction: Junior and Senior only.

SOAN 375 Globalization and Culture 3.0 SH []

Uses both theories and case examples to explore the concept of globalization through the lens of cultural anthropology. Analyzes the global flows of money, people, commodities, media, and ideas while considering how class, gender, and ethnicity affect the way globalization is experienced around the world.

Class Level Restriction: Junior and Senior only.

SOAN 385 Ethnographic Research 4.0-6.0 SH [GESS]

Qualitative research that includes participant observation and structured and unstructured interviews. Students will conduct independent field research of a student-selected, faculty-approved topic. They will then analyze the data they collect with the purpose of developing theories and writing an ethnography, a detailed description of a culture. May be offered for variable credit from four to six semester hours.

SOAN 390 Independent Study 1.0-12.0 SH []

Individual study under faculty supervision in any aspect of sociology or anthropology. Allows exploration of topics not considered in regular courses, or advanced work in areas like human services, criminology, archaeology, community organization, race, ethnicity, social class, gender roles, or family studies. May be taken for variable credit from one to twelve semester hours. May be taken more than once if topics differ.

Class Level Restriction: Junior and Senior only.

SOAN 395 Internship 3.0-6.0 SH []

Field experience in social service agency, organization, or institution. Application of interpersonal and organizational skills, plus knowledge gleaned from courses. Includes field sponsor supervision, periodic self-assessments, final paper, and weekly faculty contact.

Prerequisite: CAR 301.

Class Level Restriction: Junior and Senior only.

SOAN 399 Capstone Proposal 2.0 SH []

Prepares students for their capstones. Students research possible topics, write a formal proposal for their capstones, and defend this proposal orally to the SOAN department for feedback. Usually taken the semester preceding the capstone but can be taken concurrently.

Prerequisite: SOAN 300.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Sociology and Anthropology Majors only.

SOAN 400 Senior Capstone Seminar 3.0-6.0 SH []

Research projects which include the application of theory and library research to contemporary social issues. May be offered for variable credit from three to six semester hours.

Prerequisite: SOAN 399.

Class Level Restriction: Senior only.

Spanish (SPAN)**SPAN 100 Introduction to Spanish 2.0 SH []**

An introduction to Spanish and some of the skills needed for learning a second language. This is the first course of a three-course sequence for fulfillment of the language requirement (GE2L) in Spanish and is required for students with no previous study of Spanish.

Class Level Restriction: Freshman and Sophomore and Junior only.

SPAN 104 Elementary Spanish I 3.0 SH []

This course is the second in the three-course sequence to fulfill the language requirement (GE2L) in Spanish. Students become effective language learners as they develop basic communication skills in Spanish: speaking, listening, reading, and writing, using the present tense. They are also introduced to the cultures of the Hispanic world.

Prerequisite: Spanish 100 or placement.

- SPAN 105 Elementary Spanish II** **3.0 SH** **[GE2L]**
Continuation from SPAN 104. Fulfills the second language requirement. The course focuses on developing sufficient oral communication skills for students to survive in daily life interactions with Spanish speakers, including speaking in the past and simple future. (A student may receive credit for only one of the courses SPAN 105, SPAN 110, or SPAN 136.)
Prerequisite: SPAN 104 or placement.
- SPAN 110 Intensive Elementary Review** **3.0 SH** **[GE2L]**
A one-course intensive review of first year Spanish with emphasis on basic grammatical structure and on development of ability to speak Spanish. Fulfills the general education second language requirement for students needing only one semester of review. (A student may receive credit for only one of the courses SPAN 105, SPAN 110, or SPAN 136.)
Prerequisite: Placement.
- SPAN 136 Language Wkshp Abroad: Elem** **3.0-6.0 SH** **[GE2L]**
Elementary language study with native speakers at an academic institution or language learning center in a Spanish-speaking country. Offered only for study abroad but may include on-campus study in the case of shorter stays abroad. (A student may receive credit for only one of the courses SPAN 105, SPAN 110, or SPAN 136.)
Prerequisite: SPAN 104 or placement into SPAN 110.
- SPAN 204 Grammar and Conversation** **3.0 SH** **[]**
Conversation, vocabulary and idiom building, grammar review.
Prerequisite: SPAN 105 or SPAN 110 or SPAN 136 or placement.
- SPAN 205 Intermediate Review** **3.0 SH** **[]**
Continuing oral review and practice of the basic structures of Spanish. Develops pronunciation, listening comprehension, speaking, reading, and writing.
Prerequisite: SPAN 204 or placement.
- SPAN 210 Practical Spanish** **3.0 SH** **[]**
After the first-year language requirement, students have the opportunity to further develop their Spanish in a practical way. This includes working on Internet sites for reading skills, the use of film and broadcasts for listening comprehension and cultural learning, and a major project on a subject of personal interest in the context of Hispanic culture.
Prerequisite: SPAN 105 or SPAN 110 or SPAN 136 or placement.
- SPAN 216 Oral Expression & Conversation** **3.0 SH** **[]**
Emphasis on a variety of activities developing oral expression, as well as listening comprehension.
Prerequisite: SPAN 205 or placement.
- SPAN 220 Hispanic Civilization** **3.0-5.0 SH** **[]**
This course, typically taught on a Principia abroad program to a Spanish-speaking area, requires study and work in Spanish to understand the historical and contemporary civilization of the area. The title will be extended to describe the current area being studied. May be taken more than once provided the area culture studied is different.
Prerequisite: SPAN 216 or placement.
- SPAN 230 Hispanic Culture** **3.0 SH** **[]**
Backgrounds of Spanish and Spanish-American culture. Special focus on contemporary Spanish-speaking cultures, including Hispanic culture in the United States. Taught in Spanish, with readings in Spanish and English. The title will be extended to describe the current culture studied. May be taken more than once provided the cultures studied differ.
Prerequisite: SPAN 204 and SPAN 205.
- SPAN 236 Lang Wkshp Abroad:Intermediate** **3.0-6.0 SH** **[]**
Intermediate language study with native speakers at an academic institution or a language learning center in a Spanish-speaking country. May include on-campus study in the case of shorter stays abroad.
Prerequisite: SPAN 105, SPAN 110, SPAN 136, or placement.

- SPAN 240 Composition** **3.0 SH** []
 Writing in Spanish is the main activity of this course. Students will be supported in their writing activity with relevant grammatical explanations as evidenced by the needs shown in their writing. Some specific readings in Spanish will be used to generate ideas for creative writing.
Prerequisite: SPAN 205 or placement.
- SPAN 241 Phonetics & Diction** **1.0-3.0 SH** []
 Theory and practice of pronunciation of the Spanish of modern Spain and Spanish-America. Audio and computer software used for drill, recording, self-criticism. May be taken twice up to a total of three semester hours.
- SPAN 260 Intro to Hispanic Literature** **3.0 SH** []
 A basic introduction to reading in Spanish and to the literature of Spain and Spanish America. Significant works representing Spanish language poetry, drama, short stories, and essays are studied in a broad historical and cultural context.
Prerequisite: SPAN 216 or placement.
- SPAN 306 Advanced Oral Expression** **3.0 SH** []
 Advanced expression in Spanish through the use of drama, video, simulated situations. Discussion topics draw from current issues in the Hispanic world and human experience.
Prerequisite: SPAN 216.
Class Level Restriction: Junior and Senior only.
- SPAN 315 Advanced Grammar & Composition** **3.0 SH** []
 Translation and free composition, based on an intensive study of grammar, verbs, and idioms.
Prerequisite: SPAN 216.
- SPAN 316 Advanced Conversation** **3.0 SH** []
 Advanced language study with a focus on developing conversational skills. Offered on Principia abroad and for credit by examination.
Prerequisite: SPAN 315.
Class Level Restriction: Junior and Senior only.
- SPAN 325 Advanced Span Language Study** **3.0 SH** []
 Continuing work in mastery of the spoken language, with emphasis on everyday vocabulary, colloquial expressions, and idioms; introduction to translating and interpreting (consecutive and simultaneous) between English and Spanish.
Prerequisite: SPAN 315.
Class Level Restriction: Junior and Senior only.
- SPAN 330 Hispanic Culture Sem: Topics** **3.0 SH** []
 Advanced study of special topics in modern Hispanic culture. Readings and discussions of texts from authentic sources that reflect the uniqueness and diversity of the cultures studied through the use of movies, songs, media images, and art within historical, political, and social contexts. Allows some in-depth research on topics of special interest to students. The title will be extended to describe the current topic. May be taken twice up to a total of six semester hours provided the topics differ.
Prerequisite: SPAN 230 and SPAN 315 or placement.
Class Level Restriction: Junior and Senior only.
- SPAN 335 Spanish Applied Linguistics** **1.0 SH** []
 Students study the phonetic, phonological, morphological, syntactic, and semantic rules of Spanish to understand what rules govern the intuitions of a native speaker in selecting how to structure utterances for communication to others and to learn how this knowledge helps us explain and teach ourselves and others.
Prerequisite: SPAN 315.
Class Level Restriction: Junior and Senior only.

SPAN 336 Lang Wkshp Abroad: Advanced 3.0-6.0 SH []

Advanced language study with native speakers at an academic institution or a language learning center in a Spanish-speaking country. Offered for study abroad only but may include on-campus study in the case of shorter stays abroad.

Prerequisite: SPAN 315.

Class Level Restriction: Junior and Senior only.

SPAN 338 Language Acquisition: Spanish 3.0 SH []

Study in Spanish of theories of second language acquisition as applied to the learner's ability to develop a near-native control of the language. Students are trained in precise self-assessment of all their linguistic and intercultural communication skills, and develop a language portfolio along with an individualized plan for continuing progress in their learning and acquisition of the Spanish language.

Prerequisite: SPAN 216 or equivalent level.

Class Level Restriction: Sophomore and Junior and Senior only.

SPAN 355 Spanish Film 3.0 SH []

Combines the viewing and discussion of classic and contemporary Spanish films with the reading of related scripts and literature. In addition to written and oral responses to the films, students present either a brief acting project or a contemporary film from Spain or Latin America. Some background in reading literature in Spanish is needed.

Prerequisite: SPAN 216.

Class Level Restriction: Sophomore and Junior and Senior only.

SPAN 371 Classical Spanish Literature 3.0 SH [GEH]

Selected masterpieces of Spanish literature before 1700.

Prerequisite: SPAN 260 or other experience reading literature in Spanish.

Class Level Restriction: Junior and Senior only.

SPAN 372 Modern Hispanic Literature 3.0 SH []

Selected works from modern and contemporary literature of Spain and/or Latin America.

Prerequisite: SPAN 260 or other experience reading literature in Spanish.

Class Level Restriction: Junior and Senior only.

SPAN 380 Spanish Literature Seminar 3.0 SH [GEH]

Seminar in a special topic of the literature of Spain or Spanish America. Example: Cervantes' Don Quijote. The title will be extended to describe the current topic. Offered upon sufficient demand.

Prerequisite: SPAN 371 or SPAN 372.

Class Level Restriction: Junior and Senior only.

SPAN 410 Highlights of Hispanic Culture 1.0 SH []

This lecture series sets in context the major achievements of Spanish-speaking peoples in Spain and Latin America from an historical, cultural, and literary perspective.

Prerequisite: one Spanish course at the 300-level.

Class Level Restriction: Junior and Senior only.

SPAN 470 Spanish Capstone Project 3.0 SH []

Students complete a faculty-approved culminating project for the major, consisting of either a research-based capstone paper, an internship, or service learning project. For all three options, Spanish must be the primary language used. Students give a public presentation of their work to the college community. The research paper is recommended for students intending to go to graduate school.

Class Level Restriction: Junior and Senior only.

Special Studies (SPST)**SPST 081 PAC Executive Board 0.0 SH []**

A non-credit course offered to members of the Public Affairs Conference Executive Board. All board members are engaged in substantive work for at least 25 hours during the semester in preparation for the annual conference. May be taken four times.

- SPST 220 Honors Inquiry** 1.0 SH []
An interdisciplinary seminar for students, from all fields, who are prepared to engage in high-level discussion and inquiry on a selected topic. May be taken three times up to a total of three semester hours.
- SPST 260 Building Learning Communities** 1.0 SH []
This course focuses on the theory and practice of developing learning communities. Theory emphasizes stages of group development, communication skills, principles of feedback, and conflict resolution. Practice includes skill development in listening and varied communication techniques. Students will participate in activities that support the development of a cohesive learning community. Taught by Center for Teaching and Learning. Non-repeatable.
- SPST 261 Learning Communities Abroad:** 1.0 SH []
Course focuses on the theory and practice of developing learning communities within the context of another culture as part of an abroad/field program. Theory emphasizes stages of group development and communication skills. Practice includes skill development in communication techniques, as well as participating in and debriefing group building activities. May be taken twice if associated with a different abroad/field program.
- SPST 270 International Field Experience** 1.0 SH []
An experiential field course offered during a term break as an elective supplement to an associated course scheduled within the term. This course applies content from the associated course in an experiential or project-based learning environment at one or more international locations. Cultural context and global citizenship will be emphasized. Repeatable up to a maximum of 3 SH with restrictions.
Prerequisite: Offered only in association with an Abroad Office approved International Field Experience.
Fee=\$500.00.
- SPST 271 Project** 1.0-3.0 SH []
A hands-on course that allows students to gain experience and skills by participating in a project. Topics will vary depending on the project's scope and disciplinary focus. The course may be stand-alone or taken in conjunction with academic course(s). The title will be extended to describe the current topic and is repeatable up to 6 semester hours.
- SPST 280 Orientation Seminar** 0.5-1.0 SH []
The orientation seminar is an opportunity for students to prepare academically, culturally, and logistically for upcoming study abroad and field programs. Offered only in association with study abroad and field programs. Title will be extended to describe the program location. May be taken more than once if associated with a different abroad or field program.
Prerequisite: acceptance on the associated abroad or field program.
- SPST 281 Reentry Seminar** 1.0 SH []
The reentry seminar is an opportunity for students to articulate the personal and academic learning gained from their study abroad or field program experience. Students share their growth and experiences through reflection, writing assignments, and the creation of a documentary presentation for the community. Offered only in association with study abroad or field programs. The title will be extended to describe the current location. May be taken more than once if associated with a different abroad or field program.
Prerequisite: successful completion of the associated abroad or field program.
- SPST 284 Field Studies** 1.0-5.0 SH []
Offered only in association with Principia field programs, this course provides an interdisciplinary survey of contemporary issues in the destination city or region. These issues may include geography, cultural history, politics, economics, religion, foreign relations, environment, the arts, etc. The title will be extended to describe the current location. May be offered for variable credit from one to five semester hours. May be taken more than once if associated with a different location.
Prerequisite: acceptance on the associated field program.