

AFRICAN AND AFRICAN AMERICAN STUDIES

AFR 132 INTRO TO RACE IN AMERICA (also SOC) 1

Course

Prerequisite: Completion or waiver of MAT 010

See SOC 132 listing for course description. This course may be used to meet the African Americans', Appalachians', and Women's perspective.

AFR 135 AFRICAN-AMERICAN WOMEN WRITERS

1 Course

(also ENG and WST)

See WST 135 for description.

AFR 138 BLACK MUSIC ENSEMBLE (also MUS 135)

1/4 Course

See MUS 135 for course description

AFR 141 AFRICAN-AMERICAN LITERATURE (also ENG) 1

Course

See ENG 141 for course description.

AFR 165 INTRODUCTION TO AFRICAN-AMERICAN HISTORY (also HIS) 1

Course

See HIS 165 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

AFR 202 WOMEN AND AFRICAN AMERICANS IN POLITICS 1

Course

(also PSC/WST)

See PSC 202 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

NOTE: In order to receive African and African American Studies or Women's Studies major or minor credit, the student's major project must focus on African Americans or women, and the course should be registered under the student's major rubric of AFR or WST, respectively.

AFR 212 LITERATURE OF CARIBBEAN WOMEN (also ENG and WST) 1

Course

Prerequisite: GSTR 203 or GSTR 210

See WST 212 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

NOTE: Noncredit for student who took this course as *GSTR 209*.

AFR 222 INTRODUCTION TO AFRICAN-AMERICAN STUDIES (also GST) 1
Course

Prerequisite: GSTR 100 or GSTR 110

With an emphasis on the humanities and social sciences, this interdisciplinary course provides an opportunity for students to evaluate the historical contributions and contemporary status of African-Americans. Beginning with an historical overview, the course surveys the following topics: social institutions, creative productions, political economy and social class, personal identity and ethnicity, and contemporary status. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

AFR 230 AFRICAN AMERICANS IN APPALACHIA (also GST) 1
Course

Prerequisite: GSTR 100 or GSTR 110

This course explores the social, political, economic, and cultural experiences of African Americans in Southern Appalachia from the beginning of European settlement to the contemporary era. The course engages students in developing an understanding of the historical experiences of African Americans in Appalachia, the discussion of issues such as the images and stereotypes of Appalachians and African Americans, and the examination of migratory patterns, education, labor organization, and religion. The course places special emphasis upon the interaction and convergence of a distinctly Appalachian experience among African Americans from the region. The course studies traditional themes within Appalachian Studies within the context of African American racial experiences.

AFR 231 AFRICAN AMERICAN RELIGIOUS TRADITIONS 1
Course

Prerequisite: GSTR 100 or GSTR 110

An introduction to religious traditions within the African American community. This Course presents overviews and analyses of these traditions from their African root to the present. Particular attention is given to the development of thought, ethics, and theology for survival, nurturing, and "meaning-making" that African American religious communities pass down from generation to generation.

AFR 234 AFRICAN-AMERICAN MUSIC: AN OVERVIEW (also MUS) 1
Course

Prerequisite: GSTR 100 or GSTR 110

See MUS 234 for course description.

AFR 260 SURVEY OF AFRICAN HISTORY (also HIS) 1 Course

Prerequisite: GSTR 100 or GSTR 110

A survey of African history from the ancient period to the late 20th century. Although the major concentration is upon “Sub-Saharan Africa” and the effects of the enslavement trade and colonialism, the course does provide a brief discussion of significant continent-wide highlights from the ancient and medieval periods. The history of Africa’s independence movements and the post-independence era also are addressed. This course may be used to meet a World Culture (Non-Western) component of the International Perspective.

AFR 270 SUB-SAHARAN BLACK AFRICAN ART (also ART) 1 Course

Prerequisite: GSTR 203 or GSTR 210

See ART 270 for course description. This course may be used to meet the Arts Perspective and a World Culture (Non-Western) component of the International Perspective.

AFR 356 SEMINAR IN AFRICAN-AMERICAN HISTORY (also HIS) 1 Course

Prerequisites: HIS 161 and 162; or AFR/HIS 165

See HIS 356 for course description.

AFR 186/286/386/486 SPECIAL TOPICS 1/2 or 1 Course

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

AFR 390/490A or B INDEPENDENT STUDY 1 Course

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

AFR 395/495 INTERNSHIP 1 to 3 Courses

Prerequisite: Sophomore, junior, or senior standing

See p. 55 this Catalog.

AFR 397/497A or B TEAM INITIATED STUDY 1 Course

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

AFR 398/498 DIRECTED STUDY **1**

Course

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

AGRICULTURE AND NATURAL RESOURCES

ANR 101 SCIENCE AND SOCIETY'S FOOD SUPPLY **1**

Course

Prerequisite: Completion or waiver of MAT 012

A laboratory course in the scientific aspects of modern agriculture for non-agricultural majors. Areas considered are: crops and animals as sources of food, the role of biotechnology, soils, crops, and animals as they relate to public awareness and social welfare. Three lectures and one laboratory session each week.

ANR 103 THE SCIENCE OF FOOD SYSTEMS (also CFS) **1**

Course

Prerequisite: Completion or waiver of MAT 012

A study of the production of food from the farm to the table, emphasizing the environmental and economic sustainability of various systems of food production. Includes the science of soil management, systems of crop and livestock management in the production of foodstuff, food chemistry, food safety, and human nutrition. Laboratories will emphasize scientific inquiries and the application of a theoretical framework to investigate and solve issues related to feeding the growing global population in a sustainable way. Three lectures and one laboratory session each week.

ANR 106 INTRODUCTION TO GLOBAL AGRICULTURE **1/2**

Course

An introductory course for students interested in agriculture, veterinary medicine, forestry, wildlife, and natural resources. The course is designed to assist students with understanding the global implications of their discipline. Class discussion will emphasize the growing importance of international, political, environmental, and social dimensions of agriculture-related topics. Should be taken in the first year. Three lectures each week.

ANR 110 ANIMAL SCIENCE **1**

Course

Introduction to the fundamental principles of animal science. Emphasis on breeding, nutrition, management, and marketing of domestic animals. The role of genetics, health, and reproductive management on the productivity of various species will be investigated. Three lectures and one laboratory session each week.

ANR 113 LIVESTOCK AND DAIRY JUDGING **1**
Course

Evaluation and selection of purebred and commercial beef and dairy cattle, sheep, and swine for breeding and market. Emphasis on production records and carcass evaluation. Three two-hour laboratory sessions each week.

ANR 130 PLANTSCIENCE **1**
Course *Prerequisite: Completion or waiver of MAT 012*

This course is designed to develop an understanding of the processes and factors affecting plant growth and development. Biological, soil, genetic, and environmental factors are discussed in relation to agronomic, horticultural, and forest plants. Principles of crop production and management are introduced with emphasis on agroecology and sustainable practices. Three lectures and one laboratory session each week.

ANR 170 AGRICULTURAL ECONOMICS **1**
Course

Prerequisite: Completion or waiver of MAT 012

A study of the fundamentals of supply and demand as they relate to the agricultural sector of the U.S. economy. Emphasis will be given to the economic principles related to consumption, production, marketing, policy, natural resource use, and finance in the food and fiber system. Four lectures each week.

ANR 310 NUTRITIONAL STUDIES **1**
Course

Prerequisites: ANR 110 or BIO 110; and CHM 121, 124, or CHM 113; or permission of instructor

Basic processes of digestion, absorption, and metabolism of nutrients. Emphasis is on feedstuff selection and analysis, animal and human nutrient needs, and ration formulation and dietary analysis for a wide variety of species. Three lectures and one laboratory session each week.

ANR 312 ADVANCED LIVESTOCK SYSTEMS **1**
Course

Prerequisite: ANR 110 or permission of instructor

An investigation into current knowledge and applied concepts in the production of livestock. Includes reviews of research in breeding, nutrition, reproduction, and economics. Emphasis on applied management skills, including health and reproductive-management techniques, feed analysis, cost accounting, and marketing. Three lectures and one laboratory each week. May be repeated for up to two credits.

ANR 320 ANIMAL DISEASES **1**

Course

Prerequisite: ANR 110 or BIO 110

Causes, symptoms, treatments, and diagnoses of animal diseases with emphasis on prevention and control. Three lectures and one laboratory each week.

ANR 324 NUTRITIONAL PHYSIOLOGY AND BIOCHEMISTRY **1**

Course

Prerequisite: CHM 113, 124, or 121; or permission of instructor

The physiological chemistry of animal nutrition, measurement of the body needs and feed value, the nutritive requirements for body processes, and productive functions. Three lectures and one laboratory session each week.

ANR 325 ANIMAL REPRODUCTION AND BREEDING **1**

Course

Prerequisite: ANR 110 or BIO 110, or permission of instructor

Physiological processes of reproduction, including gonadal function, endocrine relationships, fertility, and factors affecting reproductive efficiency. In addition, the course covers the application of genetics to the improvement of farm animals. Both qualitative and quantitative genetics will be stressed. Three lectures and one laboratory session each week.

ANR 330 FORAGE AND ROW CROP PRODUCTION **1**

Course

Prerequisite: ANR 130 or BIO 314

This course is designed to develop an understanding of the biology, management, and uses of major crop plants. Interactions between cropping systems and the larger ecosystem will be discussed. Soil, genetic, and environmental factors will be related to crop management, yield, and quality, with emphasis on sustainable practices and planning sustainable systems. Both regionally and nationally important crop species will be discussed. Three lectures and one laboratory session each week.

ANR 335 PLANT PHYSIOLOGY **1**

Course

Prerequisites: ANR 130 or BIO 314; and CHM 121 or CHM 113

A study of the metabolic activities of higher plants with special emphasis on mineral nutrition, respiration, photosynthesis, and plant hormones. Three lectures and one two-hour laboratory session each week.

ANR 340 SOIL SCIENCE

1

Course

Prerequisite: ANR 130 or BIO 314

An applied study of physical, chemical, and biological properties of soils, emphasizing an ecological approach to management in a variety of contexts including field crops, horticultural crops, forests, and urban environments. This course covers soil formation and classification; fertility for plant nutrition; energy, water, and nutrient cycling; soil degradation and conservation; and soil-quality testing. Students conduct field and laboratory analyses, group and individual research projects, and reviews of the soil-science literature. Three lectures and one laboratory each week.

ANR 342 SOIL AND WATER CONSERVATION

1

Course

Prerequisite: ANR 340 or permission of instructor

This course examines hazards, measurements, causes, and solutions for erosion, sedimentation, and pollution of soils, surface, and groundwater. The primary perspective will be agricultural, but issues related to urban development, engineering, mining, and other land uses also will be discussed. Linkages between soil and water resources and environmental quality will be emphasized. Appalachian examples will be used as models whenever possible. Three lectures and one laboratory session each week.

ANR 350 HORTICULTURE

1

Course

Prerequisite: ANR 130 or BIO 314

This course covers plant propagation, soil and pest management, harvesting, storage, processing, and marketing methods for vegetables, fruits, herbs, and flowers. This course takes an agro-ecological approach to production and management and emphasizes methods appropriate for home gardens and small farms. A diverse array of field and greenhouse practices and systems are examined and evaluated within the context of sustainability. Three lectures and one laboratory session each week.

ANR 351 LANDSCAPE HORTICULTURE

1

Course

Prerequisite: ANR 130 or BIO 110

A survey of horticultural design and management for open spaces and human habitations including landscapes, ornamentals, turf, indoor plants, and urban forestry. This course covers the use of ecological principles to develop low-maintenance and functional landscapes; identification, classification, and nomenclature of environmental plants; propagation methods; pest and soil fertility management; and computer-assisted designing. Three lectures and one laboratory session each week.

ANR 360 FOREST AND WILDLIFE MANAGEMENT **1**
Course

Prerequisite: ANR 130 or ANR 110 or BIO 110

Course integrates ecological, economic, philosophical, and historical aspects of forest and wildlife management. Students learn about the theoretical underpinnings of modern natural-resource management, such as species identification, site preparation and planting, habitat conservation, field sampling, biological monitoring, and harvesting. Local, regional, and global topics are covered, including the role of forests in global ecological processes, conservation of biodiversity, ecological economics, and the sustainability of forest and wildlife uses. Three lectures and one laboratory session each week.

ANR 365 BEES AND BEEKEEPING **1**
Course

Prerequisite: Any ANR or BIO course; or permission of instructor

An introduction to honeybee: biology and the practice of beekeeping, also known as apiculture. Students will learn how an understanding of bee biology, generated through observation and experimentation, has been applied to develop methods-simple as well as intricate-to manage honeybee colonies for various purposes, such as honey and wax production and crop pollination. Topics covered will include honeybee biology (anatomy, physiology, behavior, ecology, and taxonomy), crop pollination and beekeeping (historical and current practices). Students will gain practical experience by working with hives, assessing hive conditions, diagnosing problems, and making management decisions.

ANR 372 AGRICULTURAL MARKETING **1 Course**

Prerequisite: ANR 170 or ECO 102

An applied approach to the fundamentals of agricultural marketing, including discussions on processing, storage, financing, and transportation. Emphasis will be placed on marketing practices of both traditional and nontraditional commodities, niche marketing, and agro tourism. An additional area of emphasis will be on using marketing as a risk-reducing tool for the producer. Four lectures per week each week.

ANR 375 FARM RESOURCE MANAGEMENT **1**
Course

Prerequisite: ANR 170 (ECO 102 acceptable, with permission of instructor)

Course emphasizes the linkages between the physical production systems and the economic and business systems used in the food and fiber industries. In addition, the social aspects of management and decision making will be addressed. Particular emphasis will be placed on organization and use of resources in a farm business. Includes investigation into the many off-

farm factors that influence on-farm decisions. Three lectures and one laboratory session each week.

**ANR 389/089 STUDY TOUR OF AGRICULTURE AND
Noncredit,**

RELATED ACTIVITIES

1/2, or 1 Course

Prerequisites for credit: Junior standing and one course each in Animal Science, Plant Science, and Economics

Two- or three-week summer tour of selected major agricultural areas. Opportunities for observation of types of farming, associated technologies, and natural-resource endowments. Visits to supply, marketing, and processing plants. Tour preceded by 12 to 18 hours of preparatory sessions during the Spring Term, followed by 3 to 6 hours of summarizing sessions. Taken as 389 for 1/2 or 1 credit or as 089 for noncredit. Written report required for credit.

**ANR 186/286/386/486 SPECIAL TOPICS
or 1 Course**

1/2

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

**ANR 390/490A or B INDEPENDENT STUDY
Course**

1

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

**ANR 492 SENIOR SEMINAR COURSE
Course**

1/2

Prerequisites: At least two ANR 300-level electives and senior standing

An interdisciplinary capstone course in which students integrate the knowledge they have gained during their undergraduate education in both the general and agricultural and natural resource discipline Areas. Students will work with the guidance of individual faculty members to research, develop and complete a project that reflects professional-level understanding of their discipline, as well as the ability to effectively communicate through oral and written presentations. Students will be able to select a business or a research emphasis for their project.

**ANR 494 LABOR/FIELD LEARNING EXPERIENCE
Course**

Noncredit

Prerequisite: Permission of the Department Chairperson

Labor/learning experience that may be completed through an experience with selected on- or off-campus agencies under the direction of a staff member in the Agriculture and Natural Resources Department. Successful completion of ANR 395/495 or 140 hours in an approved labor position

may satisfy this requirement. **NOTE:** Required of all majors; *should be taken prior to this senior year.*

ANR 395/495 INTERNSHIP **1 to 3**

Courses

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

ANR 397/497A or B TEAM INITIATED STUDY **1**

Course

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.*

ANR 398/498 DIRECTED STUDY **1**

Course

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

ART

ART 111 PRINTMAKING **1**

Course

This course is an introduction to techniques and problem solving. A study of printmaking through intaglio and relief techniques, including etching and linoleum cut. Six in-class studio hours per week. This course may be used to meet the Arts Perspective. Course Fee: \$10, plus the cost of materials.

ART 115 DRAWING FUNDAMENTALS **1**

Course

Offered: Typically Fall and Spring terms

This course is an introduction to drawing, stressing observation and recording. A broad range of techniques and materials are presented. Three two-hour studio periods per week. This course may be used to meet the Arts Perspective. Course Fee: \$10, plus cost of materials.

ART 116 PAINTING I **1**

Course

This course is an introductory studio experience that explores media and practice. Student understanding will expand and propel learning as a modern media-acrylic paint on board or canvas-is employed. Using paint in a structured sequence, students will acquire essential skills and methods of problem-solving and critical analysis, as well as verbal articulation of goals,

means, and outcomes. Study of historical and contemporary paintings will provide information, influence, and inspiration. Course Fee: \$10, plus cost of materials.

ART 120 SURVEY OF WESTERN ART HISTORY **1**

Course

A chronological consideration of the visual arts from pre-historic to modern times. Major developments in periods, styles, and artists will be discussed relative to time, place, and context.

ART 122 CERAMIC PRODUCTION **1**

Course

Prerequisites: Labor position in Ceramic Apprenticeship Program and permission of instructor

A study of the specific problems encountered when designing and executing a repetitive form. Emphasis on development of design for functional forms produced in coordination with the Ceramic Apprenticeship Program. Six studio hours per week. Course Fee: \$10, plus cost of materials. (May not be repeated for credit.) NOTE: This course is noncredit for students who took Ceramic Production I or II, formerly ART 121 and 122, respectively).

ART 123 CERAMICS I **1**

Course

An introductory studio experience with the medium of clay, including ceramic forming, glazing, and firing. Ceramic techniques will be studied, along with current art/craft theory and ceramic history. Six in-class studio hours per week. This course may be used to meet the Arts Perspective. Course Fee: \$10, plus the cost of materials.

ART 125 FIBERS I **1**

Course

An introductory studio experience exploring the techniques and expressive possibilities of the fibers medium through four-harness loom weaving (loom controlled and tapestry), embroidery, 3-D forms created through coiling and twining, and direct application surface design and resists with dyes. Fiber art will be studied with consideration given to the history of textiles and current artists and theories. Six in-class studio hours per week. This course may be used to meet the Arts Perspective. Course Fee: \$10, plus the cost of materials.

ART 130 SCULPTURE I **1**

Course

This course is an introduction to techniques and problem solving. A study of sculpture through direct and indirect techniques including casting and carving. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 205 LIFEDRAWING **1**

Course

Prerequisite: ART 115 with a grade of C or higher; or permission of instructor

A rigorous and disciplined approach to the accurate depiction of the human figure, with work in various drawing media and size formats. Two studio periods per week will consist of drawing for accuracy from the human model, with one session per week consisting of critiquing homework

figure-drawing assignments and selected in-class figure drawings. Course Fee: \$10, plus cost of materials.

ART 211 PRINTMAKING II

1

Course

Prerequisite: ART 110, with a grade of C or higher, and ART 111; or permission of instructor

This course will present additional techniques not offered in ART 111 and introduces conceptually based problem solving. Students will employ intaglio and relief techniques, including dry point and woodcut. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 216 PAINTING II

1

Course

Prerequisites: ART 110 and ART 115 with grades of C or higher; or permission of instructor

This course will present additional techniques not offered in ART 116 and introduce conceptually based problem solving. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 223 CERAMICS II

1

Course

Prerequisite: ART 110 and ART 123 with grades of C or higher; or permission of instructor

An expanded study of ceramic forming, glazing, and firing techniques through an introduction of conceptually based problem solving assignments. Course Fee: \$10, plus cost of materials.

ART 225 FIBERS II

1

Course

Prerequisites: ART 110 and ART 115 with grades of C or higher; or permission of instructor

This course will expand on the fibers processes and materials used in ART 125 and introduce the student to conceptual problem solving using the Fibers medium. The first part of the class will be learning construction and surface techniques. The second part of the class will focus on using multiple fibers techniques as a means of personal expression, emphasizing the idea and its expression. Readings, textiles from the collection, and slide presentations will give the Student a basic exposure to the history of textiles and current events and thoughts in Fiber Arts. Six in-class studio hours per week. Course Fee: \$10, plus cost of materials.

ART 230 SCULPTURE II

1 Course

Prerequisites: ART 110 and ART 130, with grades of C or higher; or permission of instructor

This course will present additional techniques and materials not offered in Sculpture 130 and introduces conceptually based problem solving. Students will employ direct and indirect techniques including welding and foundry casting. Six in-class studio hours per week. Course Fee: \$10, plus cost of materials.

ART 235 TEACHING ART IN THE EARLY ELEMENTARY GRADES **1 Course**

Designed for the Education Studies major preparing to teach in grades K-4. Non-Art majors planning careers in occupational therapy, special education, child development, or community art programs also would benefit from this course. Lecture-studio experiences in creative methods of teaching the visual arts, material, techniques, concepts, and the relation of art to the needs of the children in grades K-4; and trends and philosophies of Art Education. Public school observation and practicum required. Course Fee: \$5, plus cost of materials.

ART 236 FOUNDATIONS OF ART EDUCATION **1 Course**

Prerequisites: GSTR 100 or GSTR 110

Designed for the Art major preparing to teach at the secondary level and/or the elementary level. This course meets K-12 certification requirements. Art majors planning careers in occupational therapy, special education, or community art programs also would benefit from this course. Lecture-studio experiences in creative methods of teaching the visual arts, materials, techniques, concepts, and the relation of art to the needs of different age levels; and trends and philosophies of Art Education. Public school observation and practicum required. Course Fee: \$5, plus cost of materials.

ART 242 MEDIEVAL ART **1 Course**

Prerequisites: GSTR 203 or GSTR 110

A survey of Medieval art in the West and the East from the early Christian period just prior to the advent of Constantine through the end of the French Gothic period and the Byzantine Empire. This course may be used to meet the Arts Perspective and the Western History Perspective.

ART 245 19TH AND 20TH CENTURY ART 1

Course

Prerequisites: For art majors, ART 120 with a grade of C or higher; or permission of instructor

Nineteenth century revolutions in art (painting, sculpture, architecture) and their impact on 20th-century art. Students will study the interaction between the arts in the contemporary world and other forces shaping today's society.

ART 246 MODERN ARCHITECTURE 1

Course

Prerequisites: ART 120, with a grade of C or higher; or permission of instructor

The development and styles of European and American architecture. Emphasis will be given to revival and archaeological influences, technology and new materials, and society and personalities during the 19th and 20th centuries. This course may be used to meet the Arts Perspective and the Western History Perspective.

ART 248 ISLAMIC ART AND ARCHITECTURE (also AST) 1

Course

Prerequisites: GSTR 203 or GSTR 210

A study of Islamic art and architecture in the Middle East, North Africa, and Spain. This course may be used to meet the Arts Perspective and the Religion Perspective.

ART 250 INDIAN AND SOUTHEAST ASIAN ART HISTORY (also AST) 1 Course

Prerequisites: GSTR 203 or GSTR 210

A survey of the religious art (Buddhist, Dravidian, Hindu, Islamic, Jain) of India and Southeast Asia. This course may be used to meet the Arts Perspective and the Religion Perspective.

ART 262 ITALIAN RENAISSANCE ART 1 Course

Prerequisites: GSTR 203 or GSTR 210

A study of the arts of Italy from 1401 to 1564 and the personalities, the social and political events, and the philosophies that interacted, shaped, and helped create them. This course may be used to meet the Arts Perspective and the Western History Perspective.

ART 267 COLONIAL AND MODERN LATIN AMERICAN ART

1 Course The art and architecture of Mexico, Central America, and South America from the 16th century to modern times examining the impact of Western colonialism. This course may be used to meet the Arts Perspective and a World Culture (Western) component of the International Perspective.

ART 270 SUB-SAHARAN BLACK AFRICAN ART (also AFR) 1 Course

Prerequisites: GSTR 203 or GSTR 210

An art and cultural study of the sculptural and architectural traditions of the peoples of West and Central Africa. This course may be used to meet the Arts Perspective and a World Culture (Non-Western) component of the International Perspective.

ART 275 PRE-COLUMBIAN LATIN AMERICAN ART 1

Course

Prerequisites: GSTR 203 or GSTR 210

The art, architecture, and culture of Mexico, Central America, and Western South America from pre-Columbian to modern times. This course may be used to meet the Arts Perspective.

ART 311 PRINTMAKING III 1

Course

Prerequisites: ART 211 or permission of instructor

This course will present advanced techniques and require students to concentrate on a single media area. In consultation with the instructor, students will work using personally derived concepts and objectives. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 316 PAINTING III 1

Course

Prerequisites: ART 216 or permission of instructor

This course will present advanced techniques and require students to concentrate on a single media area. In consultation with the instructor, students will work using personally derived concepts and objectives. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 323 CERAMICS III 1

Course

Prerequisites: ART 223 or permission of instructor

An advanced study of ceramics including forming, glazing, and firing techniques, in the context of personally derived conceptual objectives. Course Fee: \$10, plus cost of materials.

ART 325 FIBERS III 1 Course

Prerequisites: ART 225 or permission of instructor

The primary purpose of this course is to provide structured time, guidance, and feedback to students who have chosen to focus on fibers. Over the course of the term, students are expected to expand their visual vocabulary with advanced techniques that focus is a specific area within the fibers medium, to explore the history of fibers, and to produce personally derived conceptual work. Projects will be student directed with the instructor guidance and should be designed to encourage growth, individual expression, and independent learning. Students also are expected to continue experimenting by continuing to build a vocabulary of materials and processes. Six in-class hours per week. Course Fee: \$10, plus cost of materials.

ART 330 SCULPTURE III 1 Course

Prerequisites: ART 230 or permission of instructor

This course will present advanced techniques and require students to concentrate on a single media area. In consultation with the instructor, students will work using personally derived concepts and objectives. Six in-class studio hours per week. Course Fee: \$10, plus cost of materials.

ART 411 PRINTMAKING IV

1 Course

Prerequisites: ART 311 or permission of instructor

This course requires students to concentrate on producing a conceptually directed independent body of work aimed at the senior exhibition. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 416 PAINTING III

1

Course

Prerequisites: ART 316 or permission of instructor

This course requires students to concentrate on producing a conceptually directed independent body of work aimed at the senior exhibition. Six in-class studio hours per week. Course Fee: \$10, plus the cost of materials.

ART 423 CERAMICS IV

1 Course

Prerequisites: ART 323 or permission of instructor

An advanced study of ceramics focusing on the production of a conceptually based independent body of work. This work may become the basis for the student's senior exhibition.

ART 425 FIBERS IV **1 Course**

*Prerequisites: ART 325 or permission of instructor
(also offered Fall 2006, as an exception)*

In this course, students will focus on producing a conceptually directed independent body of work aimed at the senior exhibition. Students are expected to expand their visual vocabulary within the fibers medium and to produce a cohesive body of work containing at least five pieces that are connected both visually and conceptually. Projects will be student directed with instructor guidance and should be designed to encourage growth, controlled individual expression, and independent learning. The student also is expected to continue experimenting by continuing to build a vocabulary of materials and methods. Six in-class studio hours per week. Course Fee: \$10, plus cost of materials.

ART 430 SCULPTURE IV **1 Course**

Prerequisites: ART 330 or permission of instructor

This course requires students to concentrate on producing a conceptually directed independent body of work aimed at the senior exhibition. Six in-class studio hours per week. Course Fee: \$10, plus cost of materials.

ART 186/286/386/486 SPECIAL TOPICS **1/2 or 1**
Course

*Prerequisites: Determined by course instructor
See p. 54 of this Catalog.*

ART 390/490A or B INDEPENDENT STUDY **1 Course**

*Prerequisite: Sophomore or junior status for 390; senior status for 490
See pp. 54-55 of this Catalog. NOTE: A required course for the Art History major.*

ART 491 INDEPENDENT STUDIO **1 Course**

Prerequisite: Permission of Department

Intensive work in an area not currently in the curriculum. A proposal for Independent Studio must be approved by the Department during the term prior to when the course is to be taken.

ART 492/493 SENIOR SEMINAR **Noncredit**
Courses

Prerequisite: Senior Status

A series of lectures, films, discussions, visiting artists programs, review, and other designated meetings. An exhibition of work or an oral presentation of a selected research topic during the senior year (ART 493) is required. Required for all Art Majors with senior status in the last two regular terms of residence.

ART 395/495 INTERNSHIP **1 to 3**
Courses

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

ART 397/497A or B TEAM INITIATED STUDY **1 Course**

*Prerequisite: Sophomore or junior status for 390; senior status for 490
See pp. 54-55 of this Catalog.*

ART 398/498 DIRECTED STUDY

1 Course

*Prerequisites: Permission of instructor
See p. 55 of this Catalog.*

ASIAN STUDIES

AST 101 INTRODUCTION TO JAPANESE I (also JPN)

1 Course

*Prerequisite: Permission of instructor
See JPN 101 for course description.*

AST 102 INTRODUCTION TO JAPANESE II (also JPN)

1 Course

*Prerequisite: JPN 101 with a grade of C or higher or permission of instructor
See JPN 102 for description.*

AST 103 INTRODUCTION TO JAPANESE III (also JPN)

1 Course

*Prerequisite: JPN 102 with a grade of C or higher or permission of instructor
See JPN 103 for course description.*

AST 122 INTRODUCTION TO CHINA (see HIS)

1 Course

See HIS 122 for course description.

AST 123 INTRODUCTION TO JAPAN (see HIS)

1 Course

See HIS 123 for course description.

AST 222 MODERN EAST ASIA (see HIS)

1 Course

*Prerequisite: AST/HIS 122 or 123; or GSTR 221 or sophomore standing
See HIS 222 for course description.*

AST 229 MODERN IMPERIALISM (also HIS)

1 Course

*Prerequisite: AST 122 (also HIS), 123 (also HIS), GSTR 203, 210, HIS 102, or 227
See HIS 229 for description. This course may be used to meet a World Culture (Western)
component of the International Perspective.*

AST 231 RELIGIONS OF INDIA AND TIBET (see REL)

1 Course

*Prerequisite: GSTR 100 or GSTR 110
See REL 231 for course description.*

- AST 232 RELIGIONS OF CHINA AND JAPAN (see REL)** **1 Course**
Prerequisite: GSTR 100 or GSTR 110
See REL 232 for course description. This course may be used to meet a Religion Perspective and a World Culture (Non-Western) component of the International Perspective.
- AST 248 ISLAMIC ART AND ARCHITECTURE (see ART)** **1 Course**
Prerequisites: GSTR 203 or GSTR 210
See ART 248 for course description.
- AST 250 INDIAN AND SOUTHEAST ASIAN ART HISTORY (see ART)** **1 Course**
Prerequisites: GSTR 203 or GSTR 210
See ART 250 for course description.
- AST 260 BUDDHISM (see REL)** **1 Course**
Prerequisites: GSTR 100 or GSTR 110
See REL 260 for course description.
- AST308 THEMES IN ASIAN TRADITIONS (see REL)** **1 Course**
Prerequisite: One AST course
See REL 308 for course description.
- AST 322 SEMINAR IN CHINESE HISTORY (see HIS)** **1 Course**
Prerequisite: HIS 122, 123, GSTR 221, or 310
See HIS 322 for course description.
- AST 323 SEMINAR IN JAPANESE HISTORY (see HIS)** **1 Course**
Prerequisite: AST/HIS 122 or 123; or GSTR 221 or sophomore standing
 The goal this course is two-fold. Through examining a key period in Japanese history we will both develop a deeper appreciation for Japanese culture and a better understanding for the various methodologies that historians employ in analyzing complex societies. By reading key primary documents and secondary material from important historians, we will develop a picture of the way social, economic, political, and cultural issues interact and shape the period. May be repeated for credit, provided the topic differs from that previously studied. This course may be used to meet a World Culture (Non-Western) component of the International Perspective.
- AST 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisite: Determined by instructor
See p. 54 of this Catalog.
- AST 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or Junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.

AST 395/495 INTERNSHIP **1 to 3**

Courses

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

AST 397/497A or B TEAM INITIATED STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

AST 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

BIOLOGY

BIO 100 INTRODUCTION TO BIOLOGY **1 Course**

Prerequisite: Completion or waiver of MAT 010, or permission of instructor

Introduction to the practice of science, the study of Biology, and the fundamental principles of living organisms. A first-year-level course specifically designed for non-Biology majors. Three class periods and one two-hour laboratory period per week. NOTE: Credit will not be given toward the Biology major.

BIO 101 HUMAN ANATOMY AND PHYSIOLOGY I **1 Course**

Prerequisite: Completion or waiver of MAT 010, or permission of instructor

A study of the gross and microscopic anatomy of the human body and how it relates to body function. Emphasis is on basic chemistry, cells, tissues, and skeletal, muscular, nervous, and cardiovascular organ systems. This course deals with physiology as an integrating process within the body. Three class periods and one two-hour laboratory period per week.

BIO 110 MODERN BIOLOGY **1 Course**

Prerequisite: Completion or waiver of MAT 012, or permission of instructor

A foundation course in biology that serves as an introduction to the major. This introduction includes the presentation of the following concepts: general chemical principles, cell structure and function, metabolism, energy pathways, cell division, classical and molecular genetics, and evolution. Historical development and contemporary considerations of these topics will be emphasized. Laboratory exercises will be experimental and descriptive. Three class periods and one three-hour laboratory per week. This first-year course is the prerequisite to all Biology courses with the exception of BIO 100, 101, 302, and 307.

BIO 302 HUMAN ANATOMY AND PHYSIOLOGY II

1

Course

Prerequisite: BIO 101 or permission of instructor

A continuing study of the organ systems of the human body. Emphasis is on the special senses, integumentary, endocrine, respiratory, digestive, urinary, and reproductive systems. A cursory study of human development and genetics also is provided. Three class periods and one two-hour laboratory per week.

BIO 307 PATHOPHYSIOLOGY: CONCEPTS OF ALTERED HEALTH

STATES 1 Course Prerequisites: *Either BIO 102, plus CHM 113 or CHM 121*

OR BIO 320, BIO 323, and CHM 121

This course will explore human pathophysiology using a conceptual model that integrates alterations in health across the lifespan as the human body continually monitors and adjusts to the stress of everyday life. The course will be organized around common health problems with three areas of focus: 1) control of normal function, 2) altered function, and 3) the implications of human response. Integration of the physiologic mechanisms of drug therapy and other treatment modalities will be included. The class will consist of three hours of lecture and a two-hour laboratory per week. **NOTE:** This course may not be used to satisfy any concentration area requirement in the Biology major.

BIO 313 EXPERIMENTAL ZOOLOGY

1

Course

Prerequisite: BIO 110 with a grade of C- or higher, or permission of instructor

This core course is designed to allow prospective majors to actively engage themselves in the practice of biology. Its primary objective will be to introduce prospective majors (second term of first year or first term of sophomore year) to methods of experimental design, analysis, scientific writing, and poster or oral presentations of results. Students will be exposed to experimental systems representing various areas of Zoology (e.g., physiology, ecology, development, parasitology, evolution, etc.). Lectures will be limited to providing adequate background information for each research system and analytical tools (i.e., statistics, graphing programs, primary literature) for analyzing data. Two class projects and one group investigative project will be required. Three class periods and one three-hour lab per week.

BIO 314 BOTANY

1

Course

Prerequisites: Completion or waiver of MAT 012; BIO 110 with a grade of C-or higher; or permission of instructor

The diversity of the major divisions of the Monera, Protista, Fungi, and Plant Kingdoms is studied with emphasis on classification, evolution, morphology, physiology, genetics, and life cycles of organisms. A written report on a botanical topic is required of all students. Three class periods and one three-hour laboratory period per week.

BIO 320 COMPARATIVE VERTEBRATE ANATOMY

1 Course

Prerequisites: BIO 110 and 313, or permission of instructor; a sophomore-level course

Structure-function relationships are used to study the internal and external morphology of various classes of vertebrates. Variations in structure will be discussed in the context of evolution of form and function. Dissections of representative vertebrates are used to illustrate the major evolutionary changes in vertebrate systems. Three two-hour class/laboratory periods per week.

BIO 322 MICROBIOLOGY

1 Course

Prerequisites: BIO 110 or 302 AND CHM 113 or 321; a sophomore-level course

A study of microorganisms and their various activities with special emphasis on bacteria and viruses. Topics include microbial cell structure and function, microbial diversity, microbial growth and metabolism, and microbial genetics. The role of microorganisms in infectious disease as well as specific and non-specific host defense also will be one of the major focuses of the course. Applied and environmental microbiology also will be discussed. Students will gain experience culturing and manipulating a wide variety of microorganisms in the lab. Students also will design, conduct, and present the results of an independent laboratory research project. Three class periods and one three-hour laboratory period per week.

BIO 323 HUMAN PHYSIOLOGY

1

Course

Prerequisites: BIO 110 and 313; AND CHM 321; or permission of instructor; a junior-level course

Structure and function of the human body is examined at the system and cellular level. The course is organized around the major organ systems: nervous and endocrine systems, respiratory and cardiovascular systems, renal and digestive systems, the immune system, and reproductive systems. Each system will be studied in isolation, and as part of the interaction among all systems in the maintenance of homeostasis. Clinical disorders will be used as examples in understanding normal physiological function, but the course does not have a medical physiology focus. Three class periods and one three-hour laboratory period per week. **NOTE:** Not open to students with credit in BIO 101 or 302.

BIO 324 PARASITOLOGY

1

Course

Prerequisite: B10 313 or permission of instructor; a sophomore-, junior-, or senior-level course

The intent of this course is to expose students to the general morphological features and life cycles of selected human helminths and arthropods with directly or indirectly affect human health. Parasite pathology, diagnosis and control will accompany this coverage. The course also will consider a number of local examples of non-human parasites in the interest of diversity and safety, and expose students to field collection strategies. Students will be required to master several techniques that will involve the recovery and proper preservation of parasites from naturally infected hosts and the completion of a permanent slide project. A second objective is to expose students to experimental designs for conducting experiments with parasites which will include an exposure to primary literature and the completion of a research poster related to an individual or group project.

BIO 326 INVERTEBRATE ZOOLOGY

1 Course

Prerequisite: BIO 313 or permission of instructor; a sophomore-, junior-, or senior-level course

This traditional course emphasizes the comparative morphology, physiology, life cycles, and evolutionary relationships of the major invertebrate phyla. Laboratories will include observation of living and preserved material, prepared slides, dissections, and numerous field collection trips. Techniques for preparing and cataloging specimens will result in the completion of an invertebrate collection. Three class periods and one three-hour lab per week.

BIO 330 GENETICS

1 Course

Prerequisites: BIO 313 and 314; CHM 322; or permission of instructor; a junior- or senior-level course

A study of the principles of heredity and their application in living organisms. Classical transmission genetics is introduced at the phenotypic level and developed at the molecular genetics level. Topics include transmission genetics; chromosome theory, structure, and transmission; genetic linkage, recombination, and mapping; human karyotypes and chromosome behavior; extra nuclear inheritance; DNA mutation and repair, gene structure, expression, and regulation; population genetics and evolution; genetic engineering and genomics; and genetic bioethics. The laboratory component of this course is research-rich, and students will conduct several research-based projects. Students also will be expected to prepare and orally present a primary research article as part of the course "Journal Club." Three class periods and one three-hour laboratory period per week.

BIO 331 DEVELOPMENTAL BIOLOGY

1 Course

Prerequisite: BIO 313 and CHM 321, or permission of instructor; a sophomore-or junior-level course

The origin and development of individual animals is described from the formation of the egg and sperm through fertilization and the development of a mature organism. The emphasis is on vertebrates, but invertebrates and plants are included as well. Lectures focus on the molecular and morphological characteristics of development, and on classical and modern experiments in the field. Students will gain experience with the primary literature of developmental biology. Laboratory exercises include work with sea urchins, chicks, fruit flies, and plants. Three class periods and one three-hour laboratory period per week.

BIO 332 MAMMALOLOGY

1 Course

Prerequisite: BIO 313 or permission of instructor

An introduction to the study of mammal biology. Emphasis will be upon classification, morphology, ecology, geographical distribution, natural life history, and field methods with a field focus on Kentucky mammals. Two class periods and two two-hour laboratory periods per week.

BIO 441 CELLULAR AND MOLECULAR: BIOLOGY

1 Course

Prerequisite: BIO 313, 314, CHM 322 or permission of instructor; BIO 322 is suggested strongly; a senior-level course

An integrated study of cell structure and function at the molecular and macromolecular levels. Emphasis is on both traditional and contemporary areas of cell biology. Topics typically discussed include plasma membrane structure and function; ion and macromolecular transport; cellular bioenergetics and metabolism; organelle structure and function; structure and function of cytoplasmic membrane systems; membrane trafficking; the cytoskeleton and cell motility; cell-to-cell interaction, communication, and signaling; the cell cycle and cell death; and special topics such as oncogenesis and stem cells. The laboratory component of this course is research

intensive, and students will participate in an on-going class-based research project as part of this course. Students also will gain experience using a wide range of cell and molecular laboratory techniques. Students will prepare and present two primary research articles as part of the course “Journal Club” and will prepare a pre-doctoral fellowship proposal based on one of their chosen articles.

BIO 442 FIELD BOTONY

1 Course

Prerequisites: Completion or waiver of MAT 012; BIO 314; or permission of instructor; a junior- or senior-level course

Identification, classifications, ecological, and economic uses of the local and regional native and naturalized flora. The focus will be spring Magnoliophytes and selected Pteridophytes and Pinophytes in eastern Kentucky. Nine hours of class, laboratory, and field work each week.

BIO 444 DENDROLOGY AND FOREST ECOLOGY

1 Course

Prerequisite: BIO 314 or permission of instructor; a junior- or senior-level course

Identification, classification, ecological, and economic uses of the native and naturalized woody plants and autumn flora of eastern Kentucky with special reference on the vegetation of the Eastern Deciduous Forest Region. Nine hours of class, laboratory, and field work each week.

BIO 186/286/386/486 SPECIAL TOPICS

1/2

or 1 Course

Prerequisites: Determined by instructor

See p. 54 of this Catalog. NOTE: Eight hours of laboratory, library, field, and discussion time to be arranged each week during Fall or Spring Term; full-time during Short Term.

BIO 390/490A or B INDEPENDENT STUDY

1 Course

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog. NOTE: Designed for the qualified student to pursue Faculty-directed primary research, or conduct a special study of a biological topic using primary literature sources, and development of special techniques in a biological specialization. A satisfactory paper and oral presentation are required.

BIO 494 EVOLUTION

1 Course

Prerequisite: Senior standing or permission of instructor

Capstone course required for all senior-level Biology majors. A study of the processes, concepts, and philosophical implications of the modern theory of biological evolution. Topics range from chemical evolution and the origin of life to macro evolutionary trends in adaptive radiation and extinction. Examples from various taxa are employed to examine concepts such as species and speciation, evolutionary rates, and the role of chance events in the evolutionary process.

Evolutionary theory is examined in relation to its ability to explain biological complexity and structural anomalies in various taxa including humans. Three two-hour class periods per week.

BIO 395/495 INTERNSHIP

1 Course

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

BIO 397/497A or B TEAM INITIATED STUDY

1 Course

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

BIO 398/498 DIRECTED STUDY

1 Course

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

CHEMISTRY

CHM 113 FUNDAMENTALS OF GENERAL AND BIOLOGICAL CHEMISTRY

1 Course

Prerequisite: Completion or waiver of MAT 012

The fundamental principles of chemistry emphasizing the nature and activity of physiological substances and of metabolic pathways. Three classes and one two-hour laboratory period each week. **NOTE:** Not for science majors.

CHM 121 STRUCTURE

1

Course

Prerequisite: Completion or waiver of MAT 012

This course is an introduction to chemistry. Topics in the course will include the structure and reactivity of atoms and molecules, periodic trends, the concepts of moles and molarity, and chemical equilibrium. Three classes and one three-hour laboratory each week. **NOTE:** Noncredit for students who have received credit for both CHM 124.

CHM 124 ENVIRONMENTAL CHEMISTRY **1**

Course

Prerequisite: Completion or waiver of MAT 012

This course is an introduction to chemistry. Topics in the course will include the structure and reactivity of atoms and molecules, periodic trends, the concepts of moles and molarity, and chemical equilibrium. The only significant difference between this course and CHM 121 is that emphasis will be placed on the application of course material to the environment. Students taking CHM 124 will be able to enter CHM 321 the following term. Three classes and one three-hour laboratory each week. NOTE: Noncredit for students who have received credit for CHM 121.

CHM 321 ORGANIC CHEMISTRY I **1**

Course

Prerequisite: CHM 121 or 124

A study of the chemistry of carbon compounds: organic acids and bases, alkanes and cycloalkanes, stereochemistry, nucleophilic substitution and elimination, alkenes, and alkynes. Emphasis will be placed on nomenclature, physical and chemical properties, reactivity, and reaction mechanisms. Three lectures and one three-hour laboratory period each week.

CHM 322 ORGANIC CHEMISTRY II **1**

Course

Prerequisite: CHM 321

A continuation of Organic Chemistry two-course sequence. Topics include: the chemistry of aromatic compounds; spectroscopy (NMR, UV/Visible, IR, Mass Spectrometry); alcohols, diols, ethers, aldehydes, and ketones; carboxylic acids and their derivatives; enols and enolates; condensation reactions; and amines. Three lectures and one three-hour laboratory period each week.

CHM 341 QUANTITATIVE ANALYSIS **1**

Course

Prerequisite: CHM 321; completion or waiver of MAT 110 (no longer offered at Berea) or MAT 115 and 125; or permission of instructor

A course designed to make connections between classroom theory and laboratory practice that emphasizes quantitative aspects of chemistry. Covering topics relating to volumetric, gravimetric, and instrumental analysis, students will develop skills in quantitative-laboratory techniques, the use of computers to analyze and stimulate data, the application of mathematics to chemical problems, error analysis, oral communication, and notebook keeping. There will be three hours of lecture and three hours of laboratory work each week.

CHM345 BIOCHEMISTRY **1**

Course

Prerequisite: CHM 341

A one-term intensive study of modern biochemistry. The class is comprised of three major sections. In the biomolecules section, students will study amino acids, nucleic acids, carbohydrates, and lipids. In the proteins section, students will study protein structure, function, and enzyme kinetics. Finally, in the metabolism section, students will study glycolysis, the citric-acid cycle, and electron transport/oxidative phosphorylation. This class

draws on all four previous classes of chemistry (CHM 121/124/321, 322, and 341). There will be three hours of lecture each week.

CHM 361 THERMOCHEMISTRY

1 Course

Prerequisite: CHM 341; MAT 225; PHY 218 (or concurrent enrollment) or PHY 315; or permission of instructor

An advanced study of classical thermodynamics and chemical kinetics. Topics include a detailed study of energy, entropy and enthalpy, multi-component phase diagrams, real gases, electrochemical systems, reaction kinetics, and transport processes. The fundamental goal is to achieve a physical description of general chemical phenomena with a strong emphasis on mathematical models. There will be three hours of lecture each week.

CHM 362 QUANTUM CHEMISTRY **1**

Course

Prerequisite: CHM 341, MAT 225, PHY 218 or PHY 315, or permission of instructor

An advanced study of quantum mechanics and statistical mechanics. Topics include in-depth treatment of various fundamental problems in quantum mechanics (particle in a box, rigid rotor, harmonic oscillator), applications of these problems to chemical systems, atomic and molecular orbital theory and structure, spectroscopy, lasers, and statistical mechanics. The fundamental goal is to achieve a physical description of the quantum nature of matter and how this manifests itself in chemical problems. This course relies heavily on mathematical approximations to difficult differential equations and interpretation of these answers in terms of probabilities. There will be three hours of lecture each week.

CHM 370 ADVANCED LABORATORY **1/2**

Course

Prerequisite: CHM 341 or permission of instructor

See general description above.

CHM 371 ADVANCED LABORATORY II **1/2**

Course

Prerequisite: CHM 370 and one additional CHM course at the 345-or-higher level (which may be taken concurrently); or permission of instructor

Continuation of CHM 370. See general description above.

CHM 470 ADVANCED LABORATORY III **1/2**

Course

Prerequisite: CHM 370 (or concurrent enrollment) and one additional CHM course at the 345-or-higher level; or permission of instructor

Continuation of CHM 371. (See general description above.) In this course, students will be expected to take an active leadership role in the group projects that are shared jointly between this course and CHM 370.

CHM 471 ADVANCED LABORATORY IV **1/2**

Course

Prerequisite: CHM 371 (or concurrent enrollment) and two additional CHM courses at the 345-and-higher-level or permission of instructor

Continuation of CHM 470. (See general description above.) In addition, students will take a written comprehensive chemistry examination as part of this course. Students will be graded pass/fail on this examination and may retake the exam multiple times throughout the term, if needed. Failure to pass this examination will result in an incomplete grade for CHM 471, which will become a grade of F on the student's transcript at the end of the next regular term.

CHM 451 ADVANCED INORGANIC CHEMISTRY **1**

Course

Prerequisite: CHM 341

A study of modern concepts in inorganic chemistry, including atomic and molecular orbital theory, ligand field theory, and molecular symmetry.

CHM 452 ADVANCED ORGANIC CHEMISTRY**1****Course***Prerequisite: CHM 322*

Topics include an introduction to molecular orbital theory, pericyclic reactions, the Woodward-Hoffmann Rules, multi-step synthesis, drug synthesis, the chemistry of heterocyclic compounds, and macromolecular chemistry. There will be three hours of lecture each week.

CHM 186/286/386/486 SPECIAL TOPICS**1/2 or 1****Course***Prerequisites: Determined by instructor*

See p. 54 of this Catalog. **NOTE:** This course will allow each instructor to offer an advanced course exploring a topic such as spectroscopy (focusing on NMR primarily), electrochemistry (fuel cells and battery technology), biochemistry (including topics such as metabolism, nucleic acids or protein chemistry), or other specialized topics.

CHM 390/490A or B INDEPENDENT STUDY **1**

Course

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

CHM 395/495 INTERNSHIP **1 to 3**

Courses

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

CHM 397/497A or B TEAM INITIATED STUDY **1**

Course

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

CHM 398/498 DIRECTED STUDY **1**

Course

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog. **NOTE:** In this course, students conduct research under the supervision of a Chemistry instructor. Each Chemistry major must complete this course or an equivalent Summer or Short Term experience. This course may be repeated as often as the student and faculty mentor see fit. Students are required to present two presentations relating to their project. One presentation must be on campus and the other off campus.

CHILD AND FAMILY STUDIES

CFS 103 THE SCIENCE OF FOOD SYSTEMS (also ANR) **1**

Course

Prerequisite: Completion or waiver of MAT 012

See ANR for course description.

CFS 110 APPAREL AND COSTUME DESIGN AND CONSTRUCTION (also THR) **1**

Course

This course offers an introduction to the design and construction of basic garments and costumes. An exploration of the history of fashion and costume history, including the social, economic, cultural and psychological factors influencing the selection and use of apparel and costumes. The course includes instruction in fibers and textiles; pattern drafting, design, fitting, and construction techniques; alterations of commercial patterns; and care, repair, storage, and recycling of clothing and costumes. Will also examine consumer buying and technological innovations used in the fashion industry. Course Fee: \$10.

CFS 115 PRINCIPLES OF FOOD SCIENCE **1**

Course

Prerequisite: Completion or waiver of MAT 012

This course offers an introduction to food science and technology as areas of the applied sciences. It examines nutrient composition of foods, the regulated use of additives and other aspects of food safety; and microbiological influences that are associated with food production,

storage, spoilage, preservation, and preparation. Lab experiments investigate principles of food chemistry for different categories of foods, food safety, sanitation, and related nutrition issues addressed in residential and commercial food environments.

Course Fee: \$15.

CFS 130 LIFESPAN HUMAN DEVELOPMENT 1

Course

Prerequisite: GSTR 100 GSTR 110

A survey of growth and development from conception through old age and death. Theories of development, contexts of development, research methodologies and historical and contemporary issues are examined to help describe the physical, social, emotional, cognitive perceptual, and moral-conscious aspects of growth and development. Individual differences, family, social, and cultural diversity, along with non-normative development for each phase of development, are examined. Directed observation is required.

CFS 145 CONSUMER DECISION MAKING 1

Course

Principles of decision making applied to the use of household resources relative to the purchase, consumption and production of goods and services. Consumer concerns such as health care, credit, housing, food, clothing, savings, insurance and protective legislation are covered. This course may be used to meet the Practical Reasoning (PR) Option.

CFS207 FAMILY RELATIONS (also WST) 1

Course

Prerequisite: GSTR 100 or GSTR 110

An introductory survey of the psycho-social aspects of family science, including an examination of functions and variations over the life cycle, diverse family forms, gender roles and power, family resources, healthy intimate relations and personal communication, and issues of parenthood This course balances theory and personal application. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and the Social Science Perspective.

CFS 210 FOUNDATIONS OF INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION (also EDS) 1 Course

Prerequisite: CFS 130 or permission of instructor

This course is designed to help students develop a philosophy of teaching and learning for children birth through kindergarten. Current thought and practice will be examined in light of the early childhood profession and its historical, philosophical, and social foundations. Public policy, legal implications, and a code of ethics will be studied. Theoretical perspectives including psychoanalytic theories, social learning theories, behaviorism, cognitive and developmental theories, the humanistic models, and the normative-descriptive systems will be used to establish a framework for analysis and assessment. Historical and contemporary models of early childhood education such as Head Start, High Scope, Montessori, British Infant Schools, Reggio Emilia, enrichment programs, and comprehensive, compensatory, and intervention models will be examined in view of their effects on children, families, and communities. 10 field hours.

CFS 217 PARENT-CHILD RELATIONS**1 Course***Prerequisite: Sophomore standing or above*

An intensive study of the nature of parent-child relations, parental roles, theories of parenting, and developmental interaction throughout the lifespan. Focuses on cultural, social, and family diversity; family resources; family services; adult and child learning principles; and historical and contemporary parenting in the United States.

CFS 221 FUNDAMENTALS OF NUTRITION**1 Course***Prerequisites: GSTR 100 or GSTR 110; AND GSTR 203 or GSTR 210*

This course surveys the relationship of nutrition as an applied science to other applied, pure or basic, social, and health sciences. It promotes consideration of nutrition as a component of personal health and well-being. It emphasizes the composition and classification of nutrients, their physiological role(s) within the human body, and outstanding dietary sources. Class discussions and activities survey common issues, controversies, myths, and cultural, social, economic, political, and other factors that influence dietary habits, food availability, and food selection are explored.

CFS 225 FOOD, CULTURE, AND SOCIETY**1 Course***Prerequisites: GSTR 203 or GSTR 210; or permission of instructor*

A study of the cross-cultural role of food as an integral component of early civilization through more modern societies, including both western and non-western cultures. Through selected readings, the use of artifacts, interviews, field trips, personal reflections, and hands-on opportunities, we will survey the historical evolution of food from early civilization through the Middle Ages, the Renaissance, the Industrial Revolution, and into the twenty-first century. This examination will explore the use of and symbolic representation of food within selected religious traditions, ethnic groups, health practices, and other aesthetic, moral, and social norms and cultural contexts. This course may be used to meet a World Culture (Western) component of the International Perspective. Course Fee: \$10.

CFS 237 HUMAN ENVIRONMENTS I**1 Course***Prerequisite: Sophomore standing or above*

Meaning of housing; legislation and finance; selection of housing, housing construction and types; housing choices for a diverse population; basic floor plans and kitchen design; design for special populations.

CFS 238 HUMAN ENVIRONMENTS II**1 Course***Prerequisites: Sophomore standing or above; CFS 237 preferred*

Selection of interior elements of housing: furniture, finishes, textiles, accessories; residential and commercial applications; characteristics of textiles utilized in home furnishings. This course may be used to meet the Arts Perspective. Course Fee: \$15.

**CFS 252 METHODS IN TEACHING FAMILY AND
CONSUMER SCIENCE EDUCATION**

1 Course

Prerequisite: Sophomore standing or above; open to CFS Education Studies majors or permission of instructor

Methods specific to teaching Family and Consumer Sciences in middle and high schools and adult education, including Special Topics such as developmentally-appropriate instruction, curriculum development, student organizations, and teaching reading in the content area. Assessment of relationship between teaching methods and cognitive science. Course Fee: \$10.

CFS 313 INFANCY AND EARLY CHILDHOOD

1 Course

Prerequisite: CFS 130

An intensive study of growth and development from conception through early childhood. Stress is placed on a critical study of the physical, social, emotional, cognitive-perceptual, and moral-conscious aspects of development. Such topics as individual differences, social and family diversity, play and developmentally appropriate learning activities, assessment and data collection, working with parents, interdisciplinary service delivery models, and intervention resources and strategies for working with individuals and families are examined in view of normative and non-normative development in prenatal life, infancy, and early childhood.

CFS 315 MIDDLE CHILDHOOD AND ADOLESCENCE

1 Course

Prerequisite: CFS 130

An intensive study of growth and development from middle childhood through adolescence. Stress is placed on a critical study of the physical, emotional, and social cognitive-perceptual and moral-conscious aspects of development. Emphasis also is placed on non-normative development during middle childhood and adolescence. Directed observations are required.

CFS 334 CULINARY ARTS AND HOSPITALITY

1 Course

Prerequisites: CFS 115 and 221; or permission of instructor

This course examines the conceptual representation of food within historical, socio-cultural, psychological, artistic, and other contexts. Principles of menu planning and management functions for residential and commercial settings are integrated throughout the course. Lab exercises, field trips, and other class activities emphasize basic culinary principles and food presentation techniques; the study of manufacturing processes, proper selection and care of table appointments; appropriate table service principles; social etiquette; and a survey of local, regional, national and international cuisines. Course Fee: \$15.

CFS 345 COMMUNITY NUTRITION**1 Course***Prerequisites: CFS 221; AND GSTR 203 or GSTR 210*

An exploration of nutritional needs and effective nutrition education models through the human lifecycle. This exploration will survey a broad framework of community food and nutrition services that are available through public, private, and non-profit organizations. The primary emphasis will be to examine food and nutrition community services as effective vehicles to address quality of life issues for mothers and infants, adolescents, young, middle, and older adults. A service-learning component will be a significant element of the course. Particular emphasis will be placed on enhancing library and research skills, critical reading, active listening skills, and effective interviewing, speaking, and writing skills. Because of its service-learning component, this course may be used to meet the Active Learning Experience (ALE) requirement. Course Fee: \$10.

CFS 350 FAMILY LAW AND POLICY**1 Course***Prerequisites: CFS 207 or permission of instructor*

Art examination of the relationship between law and family. This course explores the inter-relationship between the evolution of family law and societal change, the controversies involving sexual and family privacy, and state versus federal regulation of families. Topics include: premarital situations and controversies, capacity to marry and the formalities of marriage; rights and duties of marital partners; annulment and separation; divorce grounds and no-fault divorce; spousal support and basic issues of property distribution; rights and responsibilities of parenthood; definitions of parent (surrogacy, adoption, presumptions of legitimacy); principles governing child custody and visitation; child support; legal protection of individuals within the family (domestic violence, child abuse, medical decisions); and regulation of non-traditional relationships (unmarried heterosexual and same-sex couples). In addition, this course examines public policy as it affects the family, including tax, civil rights, social security, economic support laws and regulations.

CFS 353 CHILDHOOD GUIDANCE AND BEHAVIORAL MANAGEMENT **1 Course***Prerequisite: CFS 130, EDS 327, or EDS 328*

A study of the behavior and development of young children focusing on theories of guidance, systematic guidance strategies, behavioral goals and outcomes, assessment of developmental levels and learning goals, best practices applications, behavior-management skills, and problem-solving strategies in working with children in learning environments and family settings. 10 field hours.

CFS 356 THE EXCEPTIONAL CHILD**1 Course***Prerequisite: CFS 130, EDS 327, or EDS 328*

An introductory course focusing on definitions, assessment, etiology, psychological effects, and treatment of mental retardation, impaired hearing, speech and vision, orthopedic problems, epilepsy, autism, childhood schizophrenia, the gifted child, and others. Attention is devoted to an introduction to individual differences and cultural, family, and social diversity, legal and ethical guidelines, intervention resources and strategies, interdisciplinary service models, and IEPs and IFSPs. 10 field hours.

CFS 358 CHILD HEALTH AND ASSESSMENT (also NUR)**1 Course***Prerequisite: Permission of instructor*

This course is designed as a comprehensive study of the health and safety needs of young children (birth through age 8) and the use of multiple assessments of children's development. Content will include prenatal and postpartum care; immunizations; chronic and acute health care needs; safety issues and good health practices; legal and ethical considerations; evaluation of assessment instruments; and assessment report composition. Students also will become competent in the use of multiple assessments such as observations, checklists, interviews, anecdotal records, play-based assessments, and norm-and-criterion-referenced tools as prescribed by state and national organizations and learned societies and will be prepared to make professional decisions regarding screening, assessment, initial program planning, program modification, and program evaluation for young children. Emphasis will be placed on the culturally sensitive collaboration between the student and the families as part of a multidisciplinary team. 20 field hours. Course Fee: \$15.

CFS 360 CURRICULUM AND MATERIALS IN EARLY CHILDHOOD EDUCATION (also EDS)**1 Course***Prerequisite: CFS 130 and 110*

This course is designed to study the foundations of curriculum, the sequence of learning activities, and the curricular materials used in learning environments for children from infancy through age five. Using research and other resources the student will explore the nature of and the appropriate use for indoor and outdoor equipment and examine how individually and developmentally appropriate materials and equipment are used to facilitate and encourage the natural or normal sequence of development of the young child and meet the programmatic objectives. Attention will be focused on developing an appreciation for the value of play, learning strategies creating healthy and safe environments, evaluation and assessment, and adapting materials and curricula for multi-ability children in child care programs, schools, and in home. 10 field hours. Course Fee: \$10.

CFS 362 CONTEMPORARY FAMILY ISSUES**1 Course***Prerequisite: CFS 107 or permission of instructor*

In-depth examination of contemporary issues that affect family functions and relations. Includes an overview of family science theories and addresses such topics as balancing needs of children and adults, divorce, single parent families, stress, demographic shifts, work-related issues, sub-cultural variations, reproductive technologies, family violence, drug/alcohol abuse, foster care, and social services. Issues are examined through readings in professional journals and research-based publications and discussed in a seminar format.

CFS 366 CROSS-CULTURAL PERSPECTIVES ON FAMILY (also WST) 1 Course

Prerequisite: SOC 100 or permission of instructor

Study of cultural influences upon family functions, structures, and behaviors, focusing on the recognition and understanding of cultural similarities and differences. Covers topics such as cross-cultural interrelationships among economy, government, religion and family; kinship systems and patterns of marital residence; cultural variations in power distribution and sex roles; differences in childrearing patterns; universal shifts from "traditional" families; and variations in roles of aging family members. This course meets an elective in the Asian Studies minor. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and the World Culture component of the International Perspective.

CFS 372 FOOD SERVICE SYSTEMS MANAGEMENT 1 Course

Prerequisite: CFS 115, 221, and 334, or permission of instructor

This course models a systems approach to management theories that relate to the effective utilization of resources in food service facilities. Emphasis is placed on the use of the computer and other technology as effective decision-making tools. This model explores quality control, food and operational safety, sanitation practices, cost control, and customer satisfaction. Lectures, labs, class activities and field trips provide experiences for examining procurement, quantity food production, service and distribution, and maintenance operations within health care, colleges/universities, restaurants, schools, and related facilities. Course Fee: \$15.

CFS 380 METHODS OF TEACHING IN EARLY CHILDHOOD EDUCATION (also EDS) 1 Course

Prerequisite: CFS/EDS 210 and 360

Consideration of theories, philosophies, principles, curricula, and materials in the teaching-learning process involved with sociodramatic play, art, music, literature, literacy and language, sensory experiences, mathematics, health and nutrition, science, social studies, and activities for large and small muscle development. The student will plan, design, and implement developmentally appropriate activities for multi-ability children in child-care programs, schools, and in home environments, as well as assist in the overall operation of a program for young children and develop best practices management knowledge and skills in preparation for teaching practicum. 24 field hours. Course Fee: \$10.

CFS 382 EARLY CHILDHOOD SPECIAL EDUCATION (also EDS) 1 Course

Prerequisite: CFS 130 and 210

This course is designed for students preparing to teach children birth through age five, and comprises a comprehensive study of early childhood special education focusing on historical developments; the impact of technology; local, state, and federal requirements; characteristics of children with disabilities; IEP and IFSP requirements and management; cultural diversity; screening, diagnosis, and assessment of young children who need special services; learning center and home-based service delivery; curriculum and instructional considerations; and, relating to, involving, and supporting families of children with disabilities. 24 field hours. Course Fee: \$15.

CFS 441 FAMILY RESOURCE MANAGEMENT**1 Course**

Prerequisite: CFS 130, 145, 207, and 221, or concurrent enrollment and senior standing

Focuses on decision-making and organizational processes to achieve individual and family goals through the effective utilization of resources. One-half term investigation of management process; remainder of term devoted to application of concepts in Home Management House practicum. Course Fee: \$15.

CFS 475 TEACHING PRACTICUM IN INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION (also EDS)**3 Courses**

Prerequisite: Completion of all required major and education courses for IECE program and admission to Student Teaching

Students in the Interdisciplinary Early Childhood Education program will spend 12-14 weeks in various approved birth through kindergarten settings under the joint guidance of supervising teachers and the early childhood education faculty of the Child and Family Studies Department. Students will develop and implement learning environments and educational experiences for multi-ability and multi-age children and their families in home-based, center-based, and school programs. All students will attend weekly one-hour seminars. By the end of the teaching practicum, students will have completed all Education portfolio requirements.

CFS 480 SENIOR SEMINAR**1 Course**

Prerequisite: CFS 130, 145, 207, 221, and 441, or concurrent enrollment and senior standing

Survey of social science research methodology and data analysis from the perspectives of a researcher and a consumer of professional research. Each student conducts an individual research project that integrates material from previous courses. Oral and written presentations of the project are required. Includes an overview of the foundations of the field of Family and Consumer Sciences in terms of individual, family, and community interaction and service and an exploration of professional resources, organizations, and publications. Course Fee: \$20.

CFS186/286/386/486 SPECIAL TOPICS**1/2 or 1****Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

CFS 390/490A or B INDEPENDENT STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

CFS 395/495 INTERNSHIP**1 to 3****Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog. NOTE: To count as a CFS Internship, the primary sponsor must be a full-time member of the CFS faculty. The CFS Department has imposed specific expectations for Internships within the Department. Please check with the Department Chairperson for additional information.

CFS 397/497A or B TEAM INITIATED STUDY **1 Course**

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.*

CFS 398/498 DIRECTED STUDY **1 Course**

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

ECONOMICS

ECO 101 PRINCIPLES OF MACROECONOMICS **1 Course**

Prerequisites: Completion or waiver of MAT 012; first-year (preferred) or sophomore standing

An introduction to the nature and method of economics. Emphasis on the determination of the level of national income, output, employment, and prices. Topics include monetary policy, fiscal policy, economic growth; may include comparative economic systems, and international trade and finance. This course may be used to meet the Social Science Perspective.

ECO 102 PRINCIPLES OF MICROECONOMICS **1 Course**

Prerequisites: Completion or waiver of MAT 012; first-year (preferred) or sophomore standing

An introduction to exchange processes, price and output determination, and alternative market structures, both in the product and resource markets. Additional topics include the role of government, public goods, income distribution, and resource or environmental economics. This course may be used to meet the Social Science Perspective.

ECO 250 APPLIED STATISTICS **1 Course**

Prerequisites: MAT 110 (no longer offered at Berea) OR MAT 115 AND BUS 125; or permission of instructor; sophomore (preferred) or junior standing

Selected statistical methods applied to economic and business data. Methods include data-based techniques of graphical display, descriptive statistics, simple probability models based on random variables, one and two sample inference on means and proportions, analysis of variance, correlation, and regression. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. **NOTE:** This course is noncredit for anyone with credit in MAT 438.

ECO 301 INTERMEDIATE MACROECONOMICS **1 Course**

Prerequisites: ECO 101 or permission of instructor; and MAT 220

Theory of aggregate income determination in the long run and over the business cycle. Development of models of consumption, investment, net exports, and government spending in both a static and dynamic setting. Includes the effect of fiscal and monetary policy on income and other macroeconomic variables. This course may be used to meet the Social Science Perspective.

ECO 302 INTERMEDIATE MICROECONOMICS **1 Course**

Prerequisite: ECO 102 or permission of instructor; and MAT 220

Theory of the economic behavior of households and firms in a market context. Includes the development of the determinants of demand, cost, production, and supply. Development of equilibrium models of exchange and welfare economics. This course may be used to meet the Social Science Perspective.

ECO 332 MONEY AND BANKING **1 Course**

Prerequisites: ECO 101 or 102; sophomore (preferred) or junior standing

Offered: Typically every Fall Term

Money, banks, and financial markets; the role of money in the economy, monetary theory, and policy; and international monetary relationships.

ECO 335 MANAGERIAL ECONOMICS **1 Course**

Prerequisites: ECO 102 and 250

A study of the application of economic decision-making processes as they relate to the management of business. This course will link together the topics of economic theory, decision sciences, and various fields of business administration.

ECO 341 ECONOMIC DEVELOPMENT: THEORY AND APPLICATION **1 Course**

Prerequisites: One introductory course in economics, history, political science, or sociology; and ECO 101 or 102

A study of the human dimensions of societal development. The course includes theoretical approaches to economic development and social change, comparative consideration of the economic and social structural characteristics of less-developed countries, and an examination of the relationship between development policy and factors of social change.

ECO 347 INTERNATIONAL ECONOMICS **1 Course**

Prerequisite: ECO 101 or 102

Theory and practice of international trade, foreign exchange, balance of payments, and international economic policy.

ECO 350 ECONOMETRICS **1 Course**

Prerequisites: ECO 250 and MAT 220

An introduction to the construction, evaluation, and use of statistical models of economic behavior. Models will be used to both predict and explain economic behavior. Time series models, single-equation models, and multi-equation models will be covered with an emphasis on estimation methods, tests of model assumptions and adequacy, and forecast performance. The course includes a number of modeling exercises using computer software.

ECO 366 PUBLIC FINANCE **1 Course**

Prerequisite: ECO 101 or 102

Social goals and fiscal institutions-federal, state, and local-including analysis of public expenditures, taxation, the national debt, and fiscal federalism.

- ECO 370 ENVIRONMENTAL ISSUES IN PUBLIC POLICY** **1 Course**
Prerequisite: ECO 101 or 102; or permission of instructor
 An examination of critical environmental and natural-resource issues and the associated public policy responses. The aim of the course is to analyze the role that public policy currently plays-and the role it should play-in helping manage and protect our local, national, and global environment. This course may be used to meet the Social Science Perspective.
- ECO 470 SEMINAR IN ECONOMICS** **1 Course**
Prerequisites: ECO 301 and 302, or permission of instructor; senior standing preferred
Offered: Typically annually (next offered Spring 2007)
 Advanced study in an area of micro- or macroeconomic theory and policy, based on selected texts and journals.
- ECO 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisites: Determined by instructor
See p. 54 of this Catalog.
- ECO 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.
- ECO 395/495 INTERNSHIP** **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.
- ECO 397/497A or B TEAM INITIATED STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.
- ECO 398/498 DIRECTED STUDY** **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

BUSINESS

- BUS 120 ACCOUNTING I** **1 Course**
Prerequisites: MAT 012; first-year (preferred) or sophomore standing
 Introduction to accounting processes, the accounting cycle, balance sheets, income statements, and related elements. This course may be used to meet the Practical Reasoning (PR) Option.

BUS 125 COMPUTER APPLICATIONS FOR BUSINESS**1 Course**

Prerequisites: MAT 010; first-year (preferred) or sophomore standing

This course is designed to introduce students to computer applications and their uses in the business setting. This will be accomplished through various computer software programs, including word processing, spreadsheet, database, and presentation software, as well as the campus network and Internet access. Students will learn to manage and analyze both business and economic data and begin to develop decision-making and communication skills applicable in a business setting. Students will develop their computer skills while working through problems that introduce them to some of the models central to the disciplines of business and economics.

BUS 130 ACCOUNTING II**1 Course**

Prerequisites: BUS 120; first-year (preferred) or sophomore standing

Introduction to analysis, including funds flow, cash flow, capital expenditures, budgeting, cost systems, volume relationships, price levels, consolidation, tax, financial statements analysis, and like topics.

BUS 240 BUSINESS LAW**1 Course**

Prerequisites: GSTR 203 or GSTR 210; sophomore (preferred) or junior standing

Introduces the legal relationships, analysis, and principles that are basic to business. Cases from law of contracts, agency, and negotiable instruments.

BUS 257 CONSUMER BEHAVIOR**1 Course**

Prerequisites: GSTR 203 or GSTR 210; sophomore (preferred) or junior standing

A study of the major factors influencing consumer behavior and the managerial uses of models of consumer decision making. Examination of the social, psychological, and economic factors of buying behavior that are identified by alternative models of consumer decision making. Emphasis is on the use of consumer-behavior models in the development of marketing strategies. This course may be used to meet the Social Science Perspective.

BUS 315 MANAGEMENT**1 Course**

Prerequisite: BUS 120 or ECO 102; or permission of instructor

An interdisciplinary consideration of the function of management in organizations with emphasis on business. Considers systems and theories, including environments, structure and processes, decision-making, planning and change, and like topics.

BUS 323 INCOME TAX**1 Course**

Prerequisite: BUS 130

Study of Internal Revenue Code. Emphasizes problems of determining and reporting income and expenses of individuals and small businesses.

BUS 324 MANAGERIAL COST ACCOUNTING**1 Course**

Prerequisite: BUS 130

The utilization of accounting in management processes. Emphasis on cost-accounting systems, budgeting, responsibility accounting, differential accounting, and capital budgeting.

BUS 326 INTERMEDIATE ACCOUNTING I**1 Course***Prerequisite: BUS 130*

An in-depth study of financial accounting topics and reporting practices. Broad topics of interest include financial accounting functions, basic theory, asset recognition, valuation, and measurement. Emphasis is placed on the development of problem-solving ability in a complex environment.

BUS 327 INTERMEDIATE ACCOUNTING II**1 Course***Prerequisite: BUS 326*

An in-depth study of financial accounting topics and reporting practices. Broad topics of interest include liability recognition and measurement, stockholder's equity, dilutive securities and investments, issues related to income measurement, and preparation and analysis of financial statements. Continued emphasis on the development of problem-solving ability in a complex environment.

BUS 345 HUMAN RESOURCES MANAGEMENT**1 Course***Prerequisite: Junior (preferred) or senior standing*

Introduction to the human-resource function in organizations, with emphasis on business. Considers human-resource planning, employee rights and obligations, job analysis, recruitment, career dynamics, training, compensation, labor, government relations, and other topics.

BUS 346 INVESTMENT ANALYSIS**1 Course***Prerequisites: BUS 130 and ECO 250; junior (preferred) or senior standing*

An investigation of investment strategies involving the integration of modern portfolio theory and capital market theory with traditional fundamental and technical analysis. Descriptive information about the investment environment, included, as well as recent theoretical developments made toward understanding how capital markets function, how prices of investment instruments are determined, and how a balance is struck between risk and return.

BUS 363 MARKETING**1 Course***Prerequisites: GSTR 203 or GSTR 210 AND ECO 102, or permission of instructor; sophomore (preferred) or junior standing*

Introduction to business and cultural environment, ethics, research, segmentation, and other topics. Consideration of product, price, promotion, distribution, and other functions.

BUS 364 PRODUCTION AND OPERATIONS MANAGEMENT**1 Course***Prerequisites: MAT 110 or MAT 115 (or waiver); BUS 125; either ECO 250 or TEC 352; or permission of instructor*

Surveys management of the production function of organizations, with emphasis on business and service. Considers the production function, analytic methods, capacity, location, job design, and operations.

BUS 366 FINANCIAL MANAGEMENT**1 Course**

Prerequisites: BUS 130 and ECO 250; junior (preferred) or senior standing

An investigation into the nature, scope, and method of managerial finance. Emphasis is placed on developing concepts and techniques necessary for making financing and investing decisions. Financial analysis, financial planning and control, working capital management, and capital budgeting are topics of interest. Issues relating to optimal capital structure, dividend policy, and the cost of capital are also included.

BUS 367 INTERMEDIATE CORPORATE FINANCE**1 Course**

Prerequisites: BUS 363 and ECO 250 or MAT 104

This course is designed to introduce the various research methods used to collect and evaluate information for marketing decision making. The course will look at both qualitative and quantitative methods of gathering data, analyzing it, and reporting findings. Individual and group projects will be used to allow students to experience the marketing-research process.

BUS 368 INTERMEDIATE CORPORATE FINANCE**1 Course**

Prerequisites: BUS 366; junior (preferred) or senior standing

A case-based intermediate financial management course emphasizing the application of theory and practice to financial decision making. Finance topics introduced in BUS 366 are covered in greater depth in this course. Emphasis is placed on the interrelatedness and multidisciplinary nature of various finance topics. The course includes such topics as capital budgeting, capital structure, working capital management, cost of capital, and mergers.

BUS 427 ACCOUNTING THEORY**1 Course**

Prerequisite: BUS 130

A consideration of the theoretical methodologies and frameworks, valuation concepts, flow problems, income statement and balance sheet accounts, disclosure, and other topics.

BUS 437 INTRODUCTION TO AUDITING**1 Course**

Prerequisites: BUS 327

Emphasis is placed on standards, objectives, procedures, and professional judgment. Further consideration is given to auditor's legal liability, professional ethics, and reliance on the auditor's professional opinion.

BUS 465 STRATEGIC MARKETING MANAGEMENT**1 Course**

Prerequisite: BUS 363

Consideration of major areas of marketing and its functions in business and nonprofit organizations, and formulation, design, and execution of marketing plans. Case method.

BUS 475 STRATEGIC MANAGEMENT**1 Course**

Prerequisite: Senior standing

An examination of the function of strategic management in organizations with emphasis on business. Using the case method, this course considers global perspectives, environments, strategies, competition, governance structure and controls, leadership and entrepreneurship, and like topics.

BUS 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

*Prerequisites: Determined by instructor
See p. 54 of this Catalog.*

BUS 390/490A or B INDEPENDENT STUDY**1 Course**

*Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.*

BUS 395/495 INTERNSHIP**1 to 3 Courses**

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

BUS 397/497A or B TEAM INITIATED STUDY**1 Course**

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.*

BUS 398/498 DIRECTED STUDY**1 Course**

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

EDUCATION STUDIES**EDS 210 FOUNDATIONS OF INTERDISCIPLINARY
EARLY CHILDHOOD EDUCATION (see CFS)****1 Course**

*Prerequisites: CFS 130 or permission of instructor
See CFS 210 for course description.*

**EDS 250 INTRODUCTION TO EDUCATION: THINKING ABOUT
LEARNING, TEACHING, AND SCHOOLING****1 Course**

Prerequisites: GSTR 100 or GSTR 110; criminal records clearance

This course is an introduction to the study of education for prospective teachers and others interested in education. The course will offer students the opportunity to explore the following essential questions: 1) What does it mean to learn? 2) What does it mean to teach well? 3) What are schools for? 4) What knowledge, dispositions, and skills are needed in order to teach well? 5) How does diversity affect teaching, learning, and schooling? The course will introduce some of the foundational ideas, issues, and beliefs-historical, political, economic, philosophical, sociological, psychological, cultural, and social-that impact the current educational climate. Students will be introduced to the Department's conceptual framework, portfolio requirements, and other academic, experiential, and professional expectations and requirements for those pursuing teacher certification. The course will include both field-based experiences and volunteer/service-learning experiences with school-aged children and/or adolescents.

**EDS 311 METHODS OF TEACHING SECONDARY SCHOOL
SOCIAL STUDIES**

1 Course

Prerequisite: Admission to the Teacher Education Program, or permission of instructor

This course introduces students to the structure of the social studies as a secondary school teaching field; provides an opportunity for students to explore various instructional approaches in the field; and enables students to examine the theoretical underpinnings of teaching practice in social studies education. In cooperation with a local social studies teacher, students develop and teach a social-studies unit. Additional focus extends to evaluation techniques in social studies, planning for instruction over longer periods of time (term and course-long planning), the role of multicultural education, and appropriate technology for use in the social-studies classroom.

**EDS 327 TEACHING AS RESEARCH:
CHILDREN AND SCHOOL STRUCTURE**

1 Course

Prerequisite: EDS 250; Education Studies P-5 major or permission of instructor

This course focuses on human development and learning theories from infancy through adolescence, with emphasis on the pre-kindergarten through intermediate years. Through reading, discussion, and related experiences, students will have the opportunity to develop understanding of significant research describing children's actions, emotions, needs, and learning; the influence of this research on classroom organization, curriculum construction, and lesson planning; and the necessity for drawing on this research in their own lifelong development as teachers. Course activities include individual and group research using both formal and informal methodologies; oral presentations and microteaching; and observing and working with children in and outside of public schools.

**EDS 328 TEACHING AS RESEARCH:
ADOLESCENTS AND SCHOOL STRUCTURE**

1 Course

Prerequisite: EDS 250 or permission of instructor

This course focuses on human development and learning theories from infancy through adolescence, with emphasis on the middle-and high-school aged child. Through reading, discussion, and related experiences, students will have the opportunity to develop understanding of significant research describing children's and adolescent's actions, emotions, needs, and learning; the influence of this research on classroom organization, curriculum construction, and lesson planning; and the necessity for drawing on this research in their own lifelong development as teachers. Course activities include individual and group research using both formal and informal methodologies; oral presentations and microteaching; and observing and working with children and adolescents in and outside of public schools.

**EDS 335 INTEGRATED CURRICULUM I:
ARTS, HUMANITIES, AND SCIENCE**

1 Course

Prerequisite: EDS 327 or permission of instructor

This course is designed to engage students in integrating the arts, the humanities, and the natural sciences, and to initiate aspiring teachers into the construction of integrated teaching materials and design of appropriate assessment and teaching strategies. Students will have opportunities to become familiar with different aspects of natural science; i.e., science as a process, science as a body of knowledge, science as a set of values, science as a social phenomenon. They will explore themselves as scientific thinkers as they learn science. Similarly, this course will provide students with opportunities to become familiar with processes and ideas relevant to the arts and humanities. Through construction and reflection, they will find the wellsprings of their own art and stories. Students will practice thinking in community as they investigate questions that drive individual inquiry in the sciences, arts, and humanities. Students will use the understandings they gain through these experiences to articulate some important relationships among the arts, the humanities, and the natural sciences; to explore and construct some integrated teaching materials; and to reflect on teaching practices that best facilitate integrated thinking and learning. Each student will propose and carry out an integrated project with children for a minimum of five hours of experience.

EDS 340 STUDENTS WITH SPECIAL NEEDS

1 Course

Prerequisite: EDS 327 or 328

This course prepares students to make the instructional and organizational modifications necessary so that children with very different academic, physical, emotional, and social needs can learn in the regular classroom. The focus is on children with a variety of special needs, such as physical and learning exceptionalities (including the gifted); bilingualism; lack of readiness for learning; and violent behaviors. Students also will explore related issues, including the need to develop understanding and skills in counseling and conflict resolution, the nature of family involvement, and school policies and procedures. Field experiences in local schools and other community agencies are an integral part of the course.

EDS 343 LITERACY I: PRIMARY, P-3

1 Course

Prerequisite: EDS 327 or permission of instructor

Students will examine the early primary reading language arts curriculum focusing on emergent literacy, oral language, reading, writing, and literature in preschool-grade 3. Students will explore the wealth of children's literature appropriate for primary children, both fiction and non-fiction, and examine its role in furthering children's growth as careful, competent, and confident thinkers, speakers, listeners, readers, and writers. Students will draw on and deepen their knowledge of the nature of English, and they will integrate their understandings with principles of human development to select and apply strategies for integrating literature in a balanced curriculum that incorporates phonics, spelling, and handwriting. In a weekly field experience with children in preschool through grade 3, students will learn to design and apply developmentally appropriate literacy experiences, create assessments for individuals and for small groups, and use the findings from those assessments to plan subsequent learning experiences for primary learners. The course includes a two-hour weekly field experience.

EDS 344 LITERACY II: INTERMEDIATE AND MIDDLE GRADES**1 Course***Prerequisite: EDS 327 or 328; or permission of instructor*

Students will examine the intermediate and middle grades reading/language arts curricula focusing on reading, writing, and content-area literacy. Students will extend their knowledge and appreciation of children's literature in varied genres and learn to integrate literature in inquiry-based, interdisciplinary units of study. Students will deepen their understanding of English spelling, phonics, grammar, vocabulary, and the reading and writing processes, and learn ways to help children acquire understandings and skills in these areas in meaningful contexts. Students will integrate these understandings with their own vision for the children they teach and with constructivist principles of human development to design rich language experiences for all children. In a weekly field experience, students will design and apply developmentally appropriate literacy experiences for individuals and small groups, taking cues from the children and building on their interests and experiences; creating assessments; and using the findings to plan subsequent learning experiences. The course includes a two-hour weekly field experience.

EDS 349 EDUCATION AND CULTURE**1 Course***Prerequisite: EDS 327 or 328, or permission of instructor*

This course serves an important purpose in broadening the context of traditional liberal arts approaches to the study of education by incorporating the field of Cultural Studies as a means to further problematize educational phenomena. A Cultural Studies approach signifies that educational phenomena are a manifestation of all educative aspects of a society and the world in which we live. As such, any attempt to make sense of education in a school context must draw on the multifaceted and discursive nature of how meaning is constructed, which will provide both prospective teachers and students pursuing other careers with the means for democratic reconstruction and transformation. Therefore, in using a Cultural Studies approach, this course will draw on several disciplines such as the arts, history, social sciences, humanities, media studies, science, business, etc., to problematize the nature of meaning-making with regard to culture and education. A conception of culture as texts and performances will emerge, and will thus have crucial implications in regard to the construction of meaning and social reconstruction.

**EDS 355 EXTENDED EXPERIENCE IN
ALTERNATIVE SETTINGS****1 Course***Prerequisites: Grade of B or higher in EDS 349 or the Education Studies Department's approval; intention to pursue teacher certification at Berea; permission of instructor*

In consultation with the instructor, students will design and carry out an experience that places them in settings and with people of cultural and/or ethnic backgrounds different from their own, and who are marginalized by merit of political, social, cultural, economic, physical, or other aspects of their situations. Students are encouraged strongly to undertake experiences in settings that will sufficiently challenge them to see life through the eyes of those with whom they will work. At the conclusion of the course, students will provide evidence of the impact of this experience, and will articulate its value in relation to their commitments, values, beliefs, and understandings about themselves as aspiring teachers.

EDS 360 CURRICULUM AND MATERIALS IN EARLY CHILDHOOD EDUCATION (see CFS) **1 Course**

Prerequisite: CFS 130 and 210

See CFS 360 for course description.

EDS 380 METHODS OF TEACHING IN EARLY CHILDHOOD EDUCATION (see CFS) **1 Course**

Prerequisite: CFS 210 and 360

See CFS 380 for course description.

EDS 382 EARLY CHILDHOOD SPECIAL EDUCATION (see CFS) **1 Course**

Prerequisite: CFS 130 and 210

See CFS 382 for course description.

EDS 435 INTEGRATED CURRICULUM II: ARTS, HUMANITIES, AND SCIENCE **2 Courses**

Prerequisite: Admission to the Teacher Education Program

This course is designed to engage students in constructing age-appropriate curricula integrating the arts, humanities, and the natural sciences, and in the design and execution of assessment tools and teaching strategies appropriate to integrated learning. Students will plan and teach science in ways that account for wondering at the world, for seeking and honoring questions, and for the intensity of pursuing inquiry. They will plan and teach so their students will experience the arts and humanities as a host of languages that can be used and honed in the process of relating with the meaningful in their lives. Through these experiences, students will come to see the content of the arts, humanities, and sciences as perfect complements for making, finding, and sharing meaning, as well as narrative inquiry as a tool for making meaning in any content. Students will draw from the body of works and resources collected during EDS 335 as they engage children in group and individual inquiries. Experiences in this course are designed to help students further articulate the value of integrated learning for vitalizing Kentucky's *Core Content for Assessment and Learning Goals*, and to refine the alignment between their vision and their work. Taken concurrently with EDS 440, with a shared daily 4-hour practicum in the schools.

EDS 440 INTEGRATED CURRICULUM III: SOCIAL STUDIES AND CONTENT LITERACY **2 Courses**

Prerequisite: Admission to the Teacher Education Program

In this course, students will explore the structure of the elementary social studies and investigate ways to integrate rich social-studies content with developmentally appropriate content area literacy instruction. Through teacher modeling, direct instruction, and cooperative and individual learning activities, students will explore strategies to help P-5 children meaningfully engage key social-studies concepts and ideas while developing competence in reading expository materials. Students will learn to assist children in conducting individual and group research using a variety of resources, including textbooks, supplementary trade books, the Internet, and interviews. Embedded in these experiences will be focused instruction to help children grapple with unfamiliar vocabulary, question what they read, draw inferences, synthesize understandings from multiple sources, and share their findings with others. In the daily practicum, students will integrate their developing knowledge with their own vision for the children they teach and with constructivist principles of human development as they design, teach, and assess a variety of integrated learning experiences, including web quests and interdisciplinary units. Taken concurrently with EDS 435, with a shared daily 4-hour practicum in the schools.

EDS 471 INTERGRATED METHODS AND MATERIALS FOR TEACHING IN MIDDLE SCHOOLS **3 Courses**

NOTE: The content and designation of this course are under revision.

EDS 472 TEACHING PRACTICUM MIDDLE SCHOOLS I **1 Course**

NOTE: The content and designation of this course are under revision.

EDS 474 ADVANCED TOPICS IN MIDDLE SCHOOL CURRICULUM **1 Course**

NOTE: The content and designation of this course are under revision.

EDS 475 TEACHING PRACTICUM IN INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION (see CFS) **1 Course**

Prerequisites: CFS 130 and 210

See CFS 475 for course description.

EDS 476 TEACHING PRACTICUM MIDDLE SCHOOLS II **3 Courses**

NOTE: The content and designation of this course are under revision.

**EDS 479 LEARNING AND ASSESSMENT IN
SECONDARY CLASSROOMS****1 Course***Prerequisite: Admission to the Teacher Education Program*

This course introduces students to applications of important learning and assessment theory in shaping pedagogical practice. Particular attention will be given to Howard Gardner's theory of multiple intelligences and to the sociocultural theory of Lev Vygotsky. Students will explore the theoretical underpinnings of behaviorist and constructivist traditions in designing instruction; targeting objectives to appropriate levels of a taxonomy of instructional objectives; designing and managing classroom environments conducive to student learning; developing appropriate strategies for implementing instruction; and exploring evaluation theory and applications of both formal and informal assessments. Special attention is directed to preparing performance evidence of addressing *New Teacher Standards* I-IV. This course is taken as part of the pre-professional block in the Teacher Education Program, which includes a partial-day field assignment in local schools.

EDS 480 STUDENTS WITH SPECIAL NEEDS**1 Course***Prerequisite: Admission to the Teacher Education Program*

This course prepares prospective teachers to make the instructional and organizational modifications necessary so that students with vastly different academic, physical, emotional, and social needs can learn in the regular secondary-school classroom. The focus is on youngsters with a variety of special needs, such as physical and learning exceptionalities (including the gifted); bilingualism; lack of readiness for learning; and violent behaviors. Working with the students in the classrooms where they are completing their teaching practicum, prospective teachers will address the special classroom management requirements and the special instructional needs arising with special-needs youngsters. Students also will explore related issues, including the need to develop skills in counseling and conflict resolution and understanding the nature of family involvement and the particular policies and procedures schools follow. This course is taken as part of the pre-professional block in the Teacher Education Program, which includes a partial-day practicum in local schools.

EDS 481 SECONDARY STUDENT TEACHING SEMINAR**1 Course***Prerequisite: Admission to Student Teaching*

Emphasis in this course is on the development of appropriate instructional units for the assigned Student Teaching settings. Students work with classroom teachers and College faculty to plan and develop activities and materials focused on the specific subject matter in which the student is seeking certification. Other topics include classroom management techniques, evaluation and assessment of student learning, and motivational techniques. Student teachers are to reflect the values and commitments undergirding Berea's Teacher Education Program in their work and relationships with children, peers, parents, mentors, and other colleagues, and they are expected to meet Berea's program goals prior to completion of the Professional Year. They will be required to submit a satisfactory exit portfolio addressing the *New Teacher Standards* established by the Kentucky Education Professional Standards Board. Taken concurrently with EDS 482.

EDS 482 SECONDARY STUDENT TEACHING (P-12, 5-12, and 8-12) 3 Courses

Prerequisite: Admission to Student Teaching

This course involves observation, participation, teaching, and a wide variety of school-related activities under the guidance of supervising teachers and staff members of the Education Studies Department. Student teachers will spend at least twelve (12) weeks, five (5) full days per week, in their assigned placement(s). Students will be expected to complete satisfactory entries for the Eligibility (exit) Portfolio required for initial teacher certification. Taken concurrently with EDS 481. **NOTE:** Students who entered Berea in or before 2004-2005 should refer to their *Catalog*. This course will remain as “Teaching Practicum in Secondary Schools (P-12, 5-12, and 8-12),” a 2-credit course, with no change to the description for those cohorts.

EDS 186/286/386/486 SPECIAL TOPICS 1/2 OR 1 Course

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

EDS 487 ELEMENTARY STUDENT TEACHING 3 Courses

Prerequisite: Admission to Student Teaching

The Elementary School Student Teaching practicum is a required component of the Professional Year experience for P-5 certification. Student teachers will spend at least twelve (12) weeks, five (5) full days per week, in their assigned placement(s). They will be involved in observing, developing curriculum, and teaching as well as taking part in a wide variety of school-related activities under the joint guidance of cooperating teachers and faculty in the Education Studies Department. Student teachers are to reflect the values and commitments undergirding Berea’s Teacher Education Program in their work and relationships with children, peers, parents, mentors, and other colleagues, and they are expected to meet Berea’s program goals prior to completion of the Professional Year. They will be required to submit a satisfactory exit portfolio addressing the *New Teacher Standards* established by the Kentucky Education Professional Standards Board. Taken concurrently with EDS 488.

EDS 488 ELEMENTARY STUDENT TEACHING SEMINAR 1 Course

Prerequisite: Admission to Student Teaching

The elementary student teaching seminar is a required component of the Professional Year experience. The seminar will support, enhance, and enrich student teachers’ professional growth and development by providing multiple opportunities to explore, discuss, and reflect upon their teaching experiences within a community of inquiry. The seminar will help student teachers to articulate and demonstrate the knowledge, teaching skills, and dispositions necessary to meet Berea’s program goals and Kentucky’s *New Teacher Standards*. A special emphasis of the seminar will be to support student teacher’s development of the required Eligibility (exit) Portfolio. The seminar will meet three hours each week. Taken concurrently with EDS 487.

EDS 390/490 A or B INDEPENDENT STUDY 1 Course

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

EDS 395/495 INTERNSHIP 1 to 3 Courses

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

EDS 397/497A or B TEAM INITIATED STUDY **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

EDS 398/498 DIRECTED STUDY **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

ENGLISH

ENG 103 ESL AND AMERICAN CULTURE **1 Course**
Prerequisite: Permission of instructor

Extensive practice in the four communication skills: reading, writing, listening, and speaking (including pronunciation), with a focus on American culture. Grammatical structures will be reviewed as needed. Introduction to idiomatic expressions and extensive vocabulary. Meets four days a week with an additional tutorial or language lab session.

ENG 104 ADVANCED ESL **1 Course**
Prerequisite: ENG 103 or permission of instructor

Reading and discussions in American literature and history, with continued attention to grammar, vocabulary, and academic writing. Meets four days a week with an additional tutorial or language lab session.

ENG 122 FORM AND MEANING IN LITERATURE **1 Course**
Offered: Typically Fall and Spring terms

Readings in various genres and periods of literature, focusing on the central techniques and development of western literature. Introduction to basic terminology of literary study and criticism. Emphasis on critical reading and writing and library research. This course may be used to meet the Arts Perspective.

ENG 130 AMERICAN TEXTS **1 Course**

The American tradition in literature, stressing major writers and genres. Emphasis on critical reading and writing and library research of the 19th century. Open to all students and strongly recommended as an introductory course for the English major. This course may be used to meet the Arts Perspective and the Western History Perspective.

ENG 135 AFRICAN-AMERICAN WOMEN WRITERS **1 Course**
(also AFR and WST)

See WST 135 for course description.

ENG 136 FILM **1 Course**

Consideration of the art of cinema, possibly including history of the film, its relationship with other art forms, its place in popular culture and/or its sociological import and cultural impact. Students will view films and videotapes as texts. Emphasis on critical reading and writing and library research. This course may be used to meet the Arts Perspective.

ENG 138 SHAKESPEARE: AN INTRODUCTION**1 Course**

Reading and discussion of Shakespeare's plays, selected from the various genres-e.g., comedy, tragedy, history, romance-and including early, mid-career, and late works. This course may be used to meet the Arts Perspective.

ENG 140 APPALACHIAN LITERATURE**1 Course**

Study of poetry, fiction, and oral literature of the region. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

ENG 141 AFRICAN-AMERICAN LITERATURE (also AFR)**1 Course**

Representative selections from fiction, poetry, and nonfiction prose of African-American authors from slavery to the present. Focus on historical and social conditions reflected in the works and relationships between African-American literature and other American literary movements. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and the Arts Perspective.

ENG 201 EXPOSITION**1 Course**

An advanced college writing course that includes persuasive, analytical, and argumentative writing styles. Reading of a variety of essays. Practice in recognizing and making appropriate stylistic choices. Emphasis on developing advanced writing skills and adroit use of sources and evidence.

ENG 202 INTRODUCTION TO JOURNALISM**1 Course**

Offered: Typically annually (next offered Spring 2007)

Study of news and news-gathering techniques, the significance of mass media in our culture and the process of organizing and reporting news. Practice in analyzing and writing journalistic forms.

ENG 203 CREATIVE WRITING**1 Course**

An imaginative writing course focusing on either poetry, fiction, or creative nonfiction; analysis of literary models; and frequent writing exercises. Conducted as a workshop, with student and instructor criticism of works. Poetry (P), fiction (F), and creative nonfiction (N) writing are offered in rotation. Students may take one or more sections, but an individual focus (P, F, or N) cannot be repeated for credit. This course may be used to meet the Arts Perspective.

ENG 206 PLAYWRITING**1 Course**

Prerequisites: GSTR 100 or 110; GSTR 203 or 210; submission of dramatic writing sample; and interview with the instructor

This course is designed to introduce students to the craft of playwriting. It will lead students through a series of writing exercises and enable them to work on an extended piece of dramatic writing (either a complete one-act play or an act of a longer, full-length work.) The course will be limited to ten students. Part one of each class will be devoted to writing exercises, discussion, and analysis; part two will be devoted to sharing new writing in a workshop setting. This course may be used to meet the Arts Perspective.

ENG 212 LITERATURE OF CARIBBEAN WOMEN (also AFR and WST) 1 Course

Prerequisite: GSTR 203 or GSTR 210

See WST 212 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and the Arts Perspective.

NOTE: Noncredit for students who took this course as GSTR 209.

ENG 223 GRAMMAR FOR TEACHERS 1 Course

Prerequisite: Sophomore standing or permission of instructor

This course is a study of modern English grammar and usage appropriate to teaching English and language arts. The emphasis will be on traditional and structural grammar, with an introduction to transformational grammar. Additional focus will be on levels of usage, standard and nonstandard English, and dialects.

ENG 237 WOMEN AND LITERATURE (also WST) 1 Course

Prerequisite: Sophomore standing

Selected literature by women, focusing on works written in English. Emphasis on historical background and ethnic and cultural influences. This course counts toward the Women's Studies major and minor, if taken under the WST rubric.

ENG 242 INTRODUCTION TO NON-WESTERN LITERATURE 1 Course

Prerequisite: Sophomore standing

Selected works of fiction by significant 20th-century authors of Asia, Latin America, and/or Africa. Emphasis on literary elements and relationships between these works, with attention to cultural influences. Satisfies one of the six English major literary-period requirements. This course counts toward the Asian Studies minor.

ENG 245 HISTORY OF THE ENGLISH LANGUAGE 1 Course

Prerequisite: GSTR 100 or 110 AND GSTR 203 or 210

A study of the history of spoken and written English from the language's Germanic roots, through its origins in England, its spread throughout the British Empire, and, finally, to its present-day status as a de facto "World Language." The course will examine the development of English in terms of both the language itself (sounds, vocabulary, dialects) and the social and political forces that have influenced it. The course is divided into five units designed to illustrate how English, like any living language, has evolved: 1) Germanic roots; 2) Old English; 3) Middle English; 4) Modern English; and 5) the politics of world English.

ENG 275 WRITING FOR SCIENCE AND TECHNOLOGY 1 Course

Prerequisite: GSTR 100 or 110; and permission of instructor

An introductory course on writing and reporting for the sciences, social sciences, technology, agriculture, nursing, and other fields. Practice with pre-writing, outlining, organizing, writing, editing, and revising technical texts. Emphasis on developing accurate language and style and learning formats for formal laboratory and research reports; laboratory journals; memos; letters; summaries; worksheets; oral presentations and demonstrations; visual aids; and other specialized communication in the physical and life sciences, nursing, and technology. Designed for first-year and sophomore students who are considering majors in disciplines requiring technical and scientific communication.

ENG 287 THE STUDY OF LANGUAGE**1 Course***Prerequisite: Sophomore standing*

Theories on the origins and nature of language; language families; development of the English language; phonology and morphology; methods of grammatical analysis; social and regional usage; and recent theoretical developments in language study.

ENG312 THE TEACHING OF ENGLISH**1 Course***Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor*

A study of secondary-school English teaching methods and theory. Critical examination of the agenda, scope, and history of the secondary English curriculum with an emphasis on its nature, purpose, and complexity in a democratic society. Planning and implementing instruction, including use of media/technology, evaluation techniques, and individual and team teaching in local schools.

343 THE EARLY NOVEL**1 Course***Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor*

Development of the novel from the 18th century through the early 19th century. Study of novel form, technique, and ideas; and the social and historical backgrounds behind the rise of the novel. Focus on novels in their cultural contexts. Satisfies one of the six English major literary-period requirements.

ENG 344 THE MODERN NOVEL**1 Course***Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor*

Selected novels from the mid-19th century through the early 20th century. Emphasis on social, historical, ideological, and aesthetic connections between the novel form and 20th-century Western culture. Satisfies one of the six English major literary-period requirements.

ENG 350 CLASSICAL AND BIBLICAL TEXTS**1 Course***Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor*

Important texts of Greek and Roman literature, with emphasis on the epic and other major literary forms, and portions of the Bible crucial in terms of literary influence. Discussion of the cultural and historical context of ancient literature. Satisfies one of the six English major literary-period requirements.

ENG 351 MEDIEVAL TEXTS**1 Course***Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor*

Important texts of the Middle Ages, emphasizing Anglo-Saxon and Middle English writers. Discussion of cultural and historical contexts of medieval literature. Satisfies one of the six English major literary-period requirements. This course may be used to meet the Arts Perspective and the Western History Perspective.

ENG 352 RENAISSANCE TEXTS**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

Important writers and/or genres of the European Renaissance, focused primarily on British texts. Discussion of cultural and historical contexts of the Renaissance. Satisfies one of the six English major literary-period requirements.

ENG 353 EIGHTEENTH-CENTURY TEXTS**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

Important writers and/or genres of both American and European literary traditions, beginning with the Restoration. Discussion of changes in social and political attitudes and beliefs, and the new culture of the Enlightenment in Europe and America. Satisfies one of the six English major literary-period requirements.

ENG 354 NINETEENTH-CENTURY TEXTS**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

Important writers and/or genres of the 19th century, including British, American, and continental texts but focusing on romantics, Victorians, and realists. Discussion of social and ideological contexts of modern Western literature. Satisfies one of the six English major literary-period requirements.

ENG 355 TWENTIETH-CENTURY TEXTS**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

Important writers and/or genres of the 20th century, focused primarily on literature from Britain and the Americas, with some international texts. Discussion of cultural and literary contexts of the works. Satisfies one of the six English major literary-period requirements.

ENG 356 MODERN POETRY**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

Major poets from Whitman and Dickinson through the Confessionals. Discussion of the departure from traditional meter and stanza to free verse and liberated imagery, in the context of changing social and psychological views. Readings from both Western and Non-Western texts. Satisfies one of the six English major literary-period requirements.

ENG 360 CHAUCER**1 Course**

Prerequisite: Sophomore standing and ENG 121, 130, or another literature course; or permission of instructor

Readings from the bulk of Chaucer's work, including *The Canterbury Tales*, *Troilus and Criseyde*, and selected minor poems. Satisfies one of the six English major literary-period requirements.

ENG 363 MILTON**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

A study of Milton's major poetry with emphasis on Paradise Lost. A close reading of the poetry with reference to the epic tradition in Western literature and Milton's poetic technique.

Satisfies one of the six English major literary-period requirements.

ENG 364 SHAKESPEARE AND HIS CONTEMPORARIES**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

Reading and discussion of plays drawn from the works of Shakespeare and his contemporaries, such as Marlowe, Jonson, Marston, Chapman, Webster, Dekker, Beaumont, and Fletcher. Satisfies one of the six English major literary-period requirements.

ENG 381 GREEK CLASSICS IN TRANSLATION**1 Course**

Prerequisite: Sophomore standing and ENG 122, 130, or another literature course; or permission of instructor

One of the Homeric epics; selected tragedies of Aeschylus, Sophocles, and Euripides; selected comedies of Aristophanes; and selections from minor poets and the philosophers. Consideration of Greek material in contemporary authors. Satisfies one of the six English major literary-period requirements. This course may be used to meet the Arts Perspective.

ENG 485 SEMINAR IN LITERATURE**1 Course**

Prerequisite: Senior standing and permission of Department Chairperson

Intensive study of a basic literary topic, to develop skills in understanding, analyzing, discussing, and writing on concentrated ideas. Content will vary according to interests and needs of English majors.

ENG 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

ENG 390/490A or B INDEPENDENT STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

ENG 395/495 INTERNSHIP**1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

ENG 397/497A or B TEAM INITIATED STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

ENG 398/498 DIRECTED STUDY**1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

THEATRE

THR 110 APPAREL AND COSTUME DESIGN **1 Course**
AND CONSTRUCTION (also CFS)

See CFS 110 for course description. Course Fee: \$10.

THR 115 PRINCIPLES OF ACTING **1 Course**

Introduction to concentration, relaxation, observation, and imagination as the actor's basic tools. Students will explore acting as a process beginning with work on the self and extending that work to character development and acting in improvisations or scenes.

THR 117 PRINCIPLES OF TECHNICAL PRODUCTION **1 Course**

Study of materials, techniques, and tools used in technical theatre production. Students will work with equipment used to create costumes, make-up, lighting, properties, scenery, and sound for theatre productions, and will study the processes and problems of stage management. This course may be used to meet the Arts Perspective.

THR 118 DRAMA AND THEATRE FOR TEACHERS **1 Course**

The theory and practice of drama and theatre in secondary education. In addition to traditional curricular and co-curricular uses of drama and theatre in secondary education, particular attention will be directed to the theory and practice of using the means, forms, and methods of drama and theatre for non-dramatic or non-theatrical ends. Examination of proven British and European practices will be included.

THR 119 DRAMATURGY AND THEATRE AESTHETICS **1 Course**

Study of basic theories of theatre aesthetics and practice through analysis of scripts, styles, and actual performances. The course will present an overview of the drama from antiquity to the postmodern era, with an emphasis on study of particular works, through written assignments, and discussion. This course may be used to meet the Arts Perspective.

THR 127 VOICE AND DICTION **1 Course**

Introduction to the theory and practice of voice production. Individual exercises in breath control, relaxation, phonation, resonance, and voice quality. Concentration on phonetics and phonetic spelling. Exercises in using voice projection and optional diction exercises for auditioning. Extensive drill-practice in the study of American-English sound.

THR 310 THEATRE AND DRAMA IN WESTERN CULTURES **1 Course**

Prerequisite: THR 119

Study of theatre and drama in key periods from the history of Western cultures. Selected periods from classical Greek and Roman to modern, studied to reveal cultural paradigms and the theatres of the periods. Focus on writing, including one research-based essay and an annotated bibliography.

THR 311 THEATRE AND DRAMA IN THE AGE OF MASS MEDIA **1 Course**

Prerequisite: THR 119

Study of forms and contexts for theatre and drama since the development of mass media. Study of drama and theatre works in relation to film, radio, and television, and theatre responses to a reduced audience. Focus on writing, including one research-based essay and an annotated bibliography.

THR 312 THEATRE AND DRAMA IN A NON-WESTERN CULTURE **1 Course**

Prerequisite: THR 119

Study of theatre and drama in a specific Non-Western culture, including those of Asia, Africa, or Native America. The specific topic will be announced before registration. The course offers a survey of significant forms, plays, and playwrights to provide understanding of how theatre and drama are modified by culture to serve purposes different from those of the West. Focuses on writing, including a research-based essay and an annotated bibliography. This course meets an elective in the Asian Studies minor.

THR 315 PRINCIPLES OF DESIGN **1 Course**

Prerequisites: THR 117 and 119

Study of principles and requirements of effective theatre production design. Work with the design process (research, vision, revision) and techniques-including sketches, renderings, and scale plans-for costuming, lighting, and scenery. Creation of a complete design for costumes, lighting, or scenery for a specific play.

THR 317 PRINCIPLES OF DIRECTING **1 Course**

Prerequisites: THR 115, 119, and THR 310 or 311 or 312

Study of directing processes, including history and contemporary directing theories. Students will read about directors and directing theory, critique productions, and do exercises in blocking, improvisation, and scene work.

THR 318 PRINCIPLES OF THEATRE MANAGEMENT **1 Course**

Prerequisites: Junior standing; THR 119; and ENG 122

A study of the history and practice of theatre management for both the nonprofit and commercial theatres in the United States. Students will create oral and written presentations in the areas of development, marketing, strategic planning, organizational structure, and general management.

THR 325 ADVANCED ACTING **1 Course**

Prerequisites: THR 115 and audition

An advanced acting class with the following possible topics: movement, stage combat, dialects, period styles, and advanced scene study. Geared toward students interested in pursuing graduate study and/or a professional career in the performing arts, with an emphasis in acting. May be repeated one time for credit.

THR 330 ACTING PRACTICUM**1 Course**

Prerequisites: THR 115 and permission of the Director of Theatre Laboratory

Intensive study of acting through work on a role in a major production. The study is designed to help students develop skills necessary for character development for a specific play and role and for a genre or period. Assignments may include character/text analysis, historical research, movement/style work, stage combat work, dialect work, or in-depth character action/relationship study.

THR 335 DESIGN PRACTICUM**1 Course**

Prerequisites: THR 315 and permission of the Director of Theatre Laboratory

Intensive study of design through work on one entire component of theatre design: costume, lighting, scenery, and/or sound. Assignments may include text analysis, historical research, appropriate sketching, modeling and/or drafting, and selection of materials for construction.

THR 340 TECHNICAL PRACTICUM**1 Course**

Prerequisites: THR 117 and permission of the Director of Theatre Laboratory

Intensive study of technical theatre production through work on one entire component of a production: costume, lighting, make-up, properties, scenery, sound, or stage management. Course responsibilities include interpretation of design plans and selection, training, and direction of a crew.

THR 345 DIRECTING PRACTICUM**1 Course**

Prerequisites: THR 317 and permission of the Director of Theatre Laboratory

Advanced practice in directing through either assistant directing with a faculty director or by directing a major production. Assignments will include script analysis, concept development, design collaboration, casting, and rehearsal direction.

THR 350 DRAMATURGICAL PRACTICUM**1 Course**

Prerequisites: THR 119; two courses chosen from THR 310, 311, or 312; and permission of the Director of the Theatre Laboratory

Practical application of drama and theatre theory to development and realization of a play production over two consecutive terms. Assignments may include historical research; assistance in directing; development of materials for teaching; and program notes, public relations, and displays to augment audience understanding and participation in productions.

THR 481 SENIOR THEATRE PROJECT**1 Course**

Prerequisite: Senior standing

Development and presentation of a special theatre project centered on the student's particular interests in theatre and demonstrating the student's integration of the entire theatre curriculum. Weekly seminar meetings with the faculty will be scheduled. To be taken during the first term of the senior year.

THR 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

THR 390/490A or B INDEPENDENT STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

THR 395/495 INTERNSHIP **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.

THR 397/497 A or B TEAM INITIATED STUDY **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

THR 398/498 DIRECTED STUDY **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

COMMUNICATION

COM 100 INTRODUCTION TO COMMUNICATION **1 Course**
A skill approach to the study of communication. Students will deliver speeches and participate in interpersonal communication exercises and activities to increase competence in assertiveness, expressiveness, and skills that enhance communication. Students will learn effective listening.

COM 101 INTERPERSONAL COMMUNICATION **1 Course**
The study of human communication as a foundation of personal identity and growth, as well as a means of interacting with others. Students will examine theories of the interpersonal communication process; consider how gender, culture, and social context affect communication; and assess the effectiveness of their own interpersonal communication.

COM 102 INTERCULTURAL COMMUNICATION **1 Course**
An examination of the relation of culture and communication. Students will study the fundamental themes and theories of communication among members of diverse cultures. Students will engage in learning experiences intended to develop their skills in constructive intercultural communication.

COM 103 FORENSICS PRACTICUM **1/4 Course**
Prerequisite: Permission of the Director of Forensics
Intensive study of public speaking through experience in co-curricular speech and debate activities. Students will participate in competitive intercollegiate speech and debate, as well as on-campus speaking activities, and will receive individual and group training in oral communication. May be repeated for credit up to one (1) full course credit.

COM 200 ORAL INTERPRETATION **1 Course**
The discovery of how oral delivery (prose, poetry, or drama) can clarify ideas of literary works and strengthen their emotional impact. Using techniques developed by the storyteller, the public speaker, and the actor, students examine a wide variety of written materials and practice oral presentation of materials before an audience. This course may be used to meet the Arts Perspective.

COM 201 ARGUMENTATION AND DEBATE**1 Course**

An examination of the theory and process of argumentation and debate. Students investigate and participate in reasoned advocacy with emphasis on evidence selection, analysis, and critical decision making, inference, and refutation. This course may be used to meet the Practical Reasoning (PR) Option.

COM 202 MASS COMMUNICATION**1 Course**

The study of the relationship between mass communication and mass culture. Students examine the dynamic nature of print and electronic media, with specific attention on how television affects cultural norms and choices.

COM 203 PERSUASION**1 Course**

The study of the art of developing means of persuasion. Students will investigate scholarship from both humanistic and behavioral perspectives to learn about processes of social influence. Designed to help students become astute consumers of persuasion and to improve their persuasive writing and speaking skills. This course may be used to meet the Practical Reasoning (PR) Option.

COM 300 THEORIES OF HUMAN COMMUNICATION**1 Course**

Prerequisite: COM 100

Survey of theories of human communication. Students investigate communication models and theories pertaining to interpersonal, intercultural, nonverbal, group, organizational, and mass communication. This course may be used to meet the Social Science Perspective.

COM 301 SMALL-GROUP COMMUNICATION**1 Course**

Prerequisite: COM 100

Study of interactions that make the small group unique as a communication setting. By participating in small groups (i.e., the panel, symposium, dialogue), students will examine communication behavior that influences group efficiency, creativity, and leadership.

COM 302 ORGANIZATIONAL COMMUNICATION**1 Course**

Prerequisite: COM 100

The study of communication in organizational life. Students will explore research and study theories that focus on the function of communication in nonprofit, civic, service-related, and corporate cultures.

COM 400 RHETORICAL CRITICISM**1 Course**

Prerequisite: COM 100

How to describe, interpret, and evaluate persuasive messages. Critical methodologies examined and applied to speeches, propaganda, and other forms of advocacy. Students will conduct and report on research in written assignments.

COM 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

COM 390/490A or B INDEPENDENT STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.

COM 395/495 INTERNSHIP **1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.

COM 397/497A or B TEAM INITIATED STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

COM 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

LATIN

LAT 101 INTRODUCTION TO LATIN I **1 Course**

The fundamentals of Latin, with readings of simple prose. Introduction to Roman culture.

LAT 102 INTRODUCTION TO LATIN II **1 Course**

Prerequisite: LAT 101 with a grade of C or higher, or permission of instructor
Continued study in the fundamentals with readings and explorations in Roman culture.

LAT 103 LITERATURE AND CIVILIZATION **1 Course**

Prerequisite: LAT 102 with a grade of C or higher, or permission of instructor
Advanced study in language and Roman culture as seen through selected writings of the Golden Age.

LAT 117 CLASSICAL ETYMOLOGY **1 Course**

A study of the Latin and Greek elements in the English language and the origins and histories of English words, for the purpose of building a larger English vocabulary of common and technical terms in the humanities and the social and natural sciences, and enhancing one's ability to read literature with understanding and pleasure. No knowledge of Greek or Latin is necessary.

LAT 210 CLASSICAL ROMAN CIVILIZATION (also HIS) **1 Course**

Prerequisite: GSTR 203 or GSTR 210
History of Rome from its foundations to 476 A.D., with emphasis on political, social, economic, and religious forces.

LAT 215 CLASSICAL MYTHOLOGY (also GST) **1 Course**

A study of the myths and legends of the gods and heroes of the Greeks and Romans, through a reading of ancient texts in translation. An exploration of the influence of classical mythology on Western literature, drama, art, music and film. No knowledge of Greek or Latin is necessary. This course may be used to meet the Arts Perspective and the Religion Perspective.

LAT 223 VIRGIL	1 Course
<i>Prerequisite: LAT 103 or permission of instructor</i>	
A study of Virgil's art, with selections from his writings. This course may be used to meet the Arts Perspective.	
LAT 321 LATIN HISTORIANS	1 Course
<i>Prerequisite: LAT 103 or permission of instructor</i>	
Selections from the writings of Caesar, Livy, and Tacitus; the art of historical writing in antiquity. This course may be used to meet the Arts Perspective.	
LAT 322 CICERO	1 Course
<i>Prerequisite: LAT 103 or permission of instructor</i>	
Selected orations, letters, and essays.	
LAT 324 CLASSICAL POETRY	1 Course
<i>Prerequisite: LAT 103 or permission of instructor</i>	
Selections of verse from the lyric and elegiac poets. This course may be used to meet the Arts Perspective.	
LAT 325 MEDIEVAL LATIN	1 Course
<i>Prerequisite: LAT 103 or permission of instructor</i>	
Selections of prose and poetry from the fourth century A.D. to the close of the Middle Ages.	
LAT 186/286/386/486 SPECIAL TOPICS	1/2 or 1 Course
<i>Prerequisites: Determined by instructor</i>	
<i>See p. 54 of this Catalog.</i>	
LAT 390/490A or B INDEPENDENT STUDY	1 Course
<i>Prerequisite: Sophomore or junior standing for 390; senior standing for 490</i>	
<i>See pp. 54-55 of this Catalog.</i>	
LAT 395/495 INTERNSHIP	1 to 3 Courses
<i>Prerequisite: Sophomore, junior, or senior status</i>	
<i>See p. 55 of this Catalog.</i>	
LAT 397/497A or B TEAM INITIATED STUDY	1 Course
<i>Prerequisite: Sophomore or junior standing for 397; senior standing for 497</i>	
<i>See pp. 54-55 of this Catalog.</i>	
LAT 398/498 DIRECTED STUDY	1 Course
<i>Prerequisite: Will vary, but always will include permission of instructor</i>	
<i>See p. 55 of this Catalog.</i>	

GREEK

- GRK 201 INTRODUCTION TO GREEK I** **1 Course**
The fundamentals of Attic and Koine (Biblical) Greek, with readings of simple prose. Not open to first-year students.
- GRK 202 INTRODUCTION TO GREEK II** **1 Course**
Prerequisite: GRK 201 with a grade of C or higher, or permission of instructor
Advanced study in the fundamentals with selected readings.
- GRK 203 GREEK LITERATURE** **1 Course**
Prerequisite: GRK 202 with a grade of C or higher, or permission of instructor
Selections from classical literature and from the New Testament.
- GRK 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisites: Determined by instructor
See p. 54 of this Catalog.
- GRK 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.
- GRK 395/495 INTERNSHIP** **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.
- GRK 397/497A or B TEAM INITIATED STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.
- GRK 398/498 DIRECTED STUDY** **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

FRENCH

- FRN 101 INTRODUCTION TO FRENCH LANGUAGE AND CULTURE I** **1 Course**
Basic French emphasizing all four language skills (listening, speaking, reading, and writing) fully integrated with culture.
- FRN 102 INTRODUCTION TO FRENCH LANGUAGE AND CULTURE II** **1 Course**
Prerequisite: FRN 101 with a grade of C or higher, or permission of instructor
Continuation of basic French as begun in FRN 101.

FRN 103 INTERMEDIATE FRENCH III **1 Course**
Prerequisite: FRN 102 with a grade of C or higher, or permission of instructor
Continued development of French language skills fully integrated with culture.

FRN 140 FRENCH CIVILIZATION PAST AND PRESENT **1 Course**
History of France from Gaul to the present day; introduction to contemporary French institutions (e.g., schools, cuisine); and everyday life. **NOTE:** Taught in English.

FRN 300 INTERMEDIATE FRENCH IV **1 Course**
Prerequisite: FRN 103 with a grade of C or higher, or permission of instructor
Completion of the four-term foundation in French language and culture; increased attention to self-expression and francophone cultures.

FRN 310 GRAMMAR AND COMPOSITION **1 Course**
Prerequisite: FRN 103 with a grade of C or higher, or permission of instructor
Advanced grammar exercises, translation reading, and composition.

FRN 315 ADVANCED FRENCH LANGUAGE SEMINAR **1 Course**
Prerequisite: FRN 310 with a grade of C or higher, or permission of instructor
Introduction to versification, explication de texte, basic comparative stylistics, and other techniques used in the advanced study of French.

FRN 320 PANORAMA OF FRENCH LITERATURE I **1 Course**
Prerequisite: FRN 310 with a grade of C or higher, or permission of instructor
A survey of French literature from the Middle Ages to 1715. This course may be used to meet the Arts Perspective.

FRN 321 PANORAMA OF FRENCH LITERATURE II **1 Course**
Prerequisite: FRN 320 with a grade of C or higher, or permission of instructor
A survey of French literature from 1715 to the 20th century. This course may be used to meet the Arts Perspective.

FRN 325 SEVENTEENTH-CENTURY FRENCH LITERATURE **1 Course**
Prerequisite: FRN 320 with a grade of C or higher, or permission of instructor
Classicism; selected works including those of Corneille, Racine, and Moliere. This course may be used to meet the Arts Perspective.

FRN 330 NINETEENTH-CENTURY FRENCH LITERATURE **1 Course**
Prerequisite: FRN 321 with a grade of C or higher, or permission of instructor
Selected prose and poetry. This course may be used to meet the Arts Perspective.

FRN 340 TWENTIETH-CENTURY FRENCH LITERATURE **1 Course**
Prerequisite: FRN 321 with a grade of C or higher, or permission of instructor
Selected prose and poetry. This course may be used to meet the Arts Perspective.

FRN 186/286/386/486 SPECIAL TOPICS **1/2 or 1 Course**
Prerequisites: Determined by instructor
See p. 54 of this Catalog.

FRN 390/490A or B INDEPENDENT STUDY **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.

FRN 395/495 INTERNSHIP **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.

FRN 397/497 A or B TEAM INITIATED STUDY **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

FRN 398/498 DIRECTED STUDY **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

GERMAN

GER 101 ELEMENTARY GERMAN I **1 Course**
Introduction to spoken German; fundamentals of grammar and pronunciation; and basic vocabulary building. Includes a self-paced language laboratory.

GER 102 ELEMENTARY GERMAN II **1 Course**
Prerequisite: GER 101 with a grade of C or higher; or permission of instructor
Continued emphasis on spoken German, fundamentals of grammar, pronunciation, and vocabulary building. Readings in light German prose. Includes a self-paced language laboratory.

GER 103 ELEMENTARY GERMAN III **1 Course**
Prerequisite: GER 102 with a grade of C or higher; or permission of instructor
Extensive practice in diction, simple composition, and vocabulary building. Readings in German prose. Includes a self-paced language laboratory.

GER 140 GERMAN CIVILIZATION **1 Course**
Prerequisite: GER 102 with a grade of C or higher; or permission of instructor
A survey of the development of German civilization from its origins to the present with emphasis on German culture. **NOTE:** Taught in English.

GER 300 GERMAN CONVERSATION **1 Course**
Prerequisite: GER 103 with a grade of C or higher, or permission of instructor
The course is intended to help students develop reasonable proficiency in conversational skills and to assist in the development of a greater command of the German language as a tool for communication.

- GER 310 ADVANCED GERMAN I** **1 Course**
Prerequisite: GER 103 with a grade of C or higher, or permission of instructor
 Readings and discussions in German civilization; introduction to modern German literature.
- GER 315 ADVANCED GERMAN II** **1 Course**
Prerequisite: GER 103 with a grade of C or higher, or permission of instructor
 Comprehensive practice of spoken and written German; introduction to contemporary German literature, and scientific German.
- GER 320 GERMAN POETRY** **1 Course**
Prerequisite: GER 310 and 315, or permission of instructor
 A study of forms of German verse and its development from the 17th century to the present. Interpretations of selected poems. This course may be used to meet the Arts Perspective.
- GER 325 GERMAN NARRATIVE PROSE** **1 Course**
Prerequisite: GER 310 and 315, or permission of instructor
 A study of selected narrative prose (novel, short story) from its origin to the present. This course may be used to meet the Arts Perspective.
- GER 330 GERMAN DRAMA** **1 Course**
Prerequisite: GER 310 and 315, or permission of instructor
 A general survey of German drama from its beginnings to the present. Readings of selected plays. This course may be used to meet the Arts Perspective.
- GER 340 GERMAN NOVEL** **1 Course**
Prerequisite: GER 310 and 315, or permission of instructor
 A study of the origin and development of the German novel. Selected readings. This course may be used to meet the Arts Perspective.
- GER 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisites: Determined by instructor
 See p. 54 of this Catalog.
- GER 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
 See pp. 54-55 of this Catalog.
- GER 395/495 INTERNSHIP** **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
 See p. 55 of this Catalog.
- GER 397/497A or B TEAM INITIATED STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
 See pp. 54-55 of this Catalog.

GER 398/498 DIRECTED STUDY

1 Course

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

HEBREW

HEB 101 INTRODUCTION TO CLASSICAL HEBREW

1 Course

This course will introduce the student to the phonology and morphology of the regular noun and verb, and the elements of syntax in Classical Hebrew. The course will consist of exercises and readings in basic Hebrew, with some simple Biblical narrative texts.

HEB 102 INTERMEDIATE CLASSICAL HEBREW

1 Course

Prerequisite: HEB 101

This course will build upon the fundamental grammar covered in HEB 101 and will devote a significant amount of time to the readings and analysis of texts from the Hebrew Bible.

HEB 103 READINGS IN BIBLIA HEBRAICA

1 Course

Prerequisite: HEB 102

The course will complete the introductory phonology, morphology and syntax of Classical Hebrew and will devote a significant amount of time to the reading and analysis of texts from the Hebrew Bible.

HEB 301 HEBREW EXEGESIS

1 Course

Prerequisite: HEB 103

Advanced applications of Hebrew grammar and syntax to the study of selected texts, primarily narratives, with an introduction to Hebrew poetry.

JAPANESE

JPN 101 INTRODUCTION TO JAPANESE I (also AST)

1 Course

Prerequisite: Permission of instructor

Introduction to Japanese as it is spoken in Japan today. Speaking and listening comprehension will be emphasized.

JPN 102 INTRODUCTION TO JAPANESE II (also AST)

1 Course

Prerequisite: JPN 101 with a grade of C or higher, or permission of instructor

Continued emphasis on Japanese oral/aural communication skills and an introduction to the Japanese written language.

JPN 103 INTRODUCTION TO JAPANESE III (also AST)

1 Course

Prerequisite: JPN 102 with a grade of C or higher, or permission of instructor

Continued development of Japanese speaking, listening, reading, and writing skills.

JPN 104 INTRODUCTION TO JAPANESE IV **1 Course**

Prerequisite: JPN 103 with a grade of C or higher, or permission of instructor

Completion of the two-term intermediate level of Japanese language instruction; continued practice of reading, writing, listening, and speaking, fully integrated with culture.

SPANISH

SPN 101 ELEMENTARY SPANISH I **1 Course**

Fundamentals of the Spanish language; development of reading, writing, and conversational skills.

SPN 102 INTRODUCTION TO SPANISH II **1 Course**

Prerequisite: SPN 101 with a grade of C or higher, or permission of instructor

A continuation of Spanish 101 with increasing emphasis on conversational skills.

SPN 103 INTRODUCTION TO SPANISH III **1 Course**

Prerequisite: SPN 102 with a grade of C or higher, or permission of instructor

Completion of Spanish grammar. Increased emphasis on writing and conversational skills.

SPN 140 HISTORY OF SPAIN (also HIS) **1 Course**

A broad survey from pre-history to present as viewed through Spain's culture, art, literature, and customs.

SPN 300 CONVERSATION **1 Course**

Prerequisite: SPN 103 with a grade of C or higher, or permission of instructor

The main objective of this course is to develop fluency in speaking everyday Spanish. May not be taken for credit by a native speaker.

SPN 310 SPANISH COMPOSITION **1 Course**

Prerequisite: SPN 103 with a grade of C or higher, or permission of instructor

A course intended to help students acquire a greater mastery of Spanish as a tool for communication through an examination of the more complex grammatical and syntactical structures; through learning idioms and vocabulary; and through writing and analyzing essays. May not be taken by native speakers without consent of instructor.

SPN 315 INTRODUCTION TO SPANISH LITERATURE **1 Course**

Prerequisite: SPN 310 with a grade of C or higher, or permission of instructor

A course designed to improve reading skills, both practical and critical, and to introduce the student to the tools necessary for literary analysis. Selections from masterpieces of Spanish and Spanish-American literature will serve as the basis for discussion. This course may be used to meet the Arts Perspective.

SPN 320 PENINSULAR LITERATURE I **1 Course**

Prerequisites: SPN 310 and 315 with a grade of C or higher in each, or permission of instructor

A survey of Spanish literature from the medieval period through the 17th century. Emphasis on major authors. This course may be used to meet the Arts Perspective.

SPN 321 PENINSULAR LITERATURE II **1 Course**

Prerequisites: SPN 310 and 315 with a grade of C or higher in each, or permission of instructor
A survey of Spanish literature from the beginning of the 18th century to the present. Emphasis on major authors. This course may be used to meet the Arts Perspective.

SPN 330 SPANISH AMERICAN LITERATURE I **1 Course**

Prerequisites: SPN 310 and 315 with a grade of C or higher in each, or permission of instructor
A survey of Spanish-American literature from its origins in the 16th century to modernism in the 19th century. This course may be used to meet the Arts Perspective.

SPN 331 SPANISH AMERICAN LITERATURE II **1 Course**

Prerequisites: SPN 310 and 315 with a grade of C or higher in each, or permission of instructor
A survey of Spanish-American literature from modernism to the present. Emphasis on major authors. This course may be used to meet the Arts Perspective.

SPN 340 THE NOVEL **1 Course**

Prerequisites: SPN 300, 310, and 315 with a grade of C or higher in each or permission of instructor
A reading of selected novels by major Spanish and Spanish-American writers. This course may be used to meet the Arts Perspective.

SPN 186/286/386/486 SPECIAL TOPICS 1/2 or 1 Course

Prerequisites: Determined by instructor
See p. 54 of this Catalog.

SPN 390/490A or B INDEPENDENT STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.

SPN 395/495 INTERNSHIP **1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.

SPN 397/497 A or B TEAM INITIATED STUDY 1 Course

Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

SPN 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

GENERAL STUDIES

GSTR 110 WRITING SEMINAR I: CRITICAL THINKING IN THE LIBERAL ARTS **1 Course**

This course is designed to help students with transitions from their past experiences to the challenges of College academic life and culture, also emphasizing writing, reasoning, and learning as foundations for continuing academic success in General Education and beyond. Each section of the course involves explicit, continuing attention to writing, reasoning, research, and reflective engagement with various texts, written and non-written. All sections initially address with students questions about the nature of education, liberal-arts education, and links to lifelong learning and living. Offered in multiple sections each year; taken in the first term of the first year.

GSTR 210 WRITING SEMINAR II: IDENTITY AND DIVERSITY IN THE U.S. **1 Course** *Prerequisite: GSTR 110*

This course is designed to develop and build upon the reasoning, writing, research, and learning emphases of GSTR 110, while engaging all students on issues close to the historic mission of the College-race, gender, Appalachia, and class. Initially, each section explores the story of Berea, including as it relates to the unifying themes of GSTR 210. Each section of the course involves explicit, continuing attention to writing, reasoning, research, and reflective engagement with various texts, including instruction in the processes of producing a research paper.

GSTR 310 UNDERSTANDINGS OF CHRISTIANITY **1 Course** *Prerequisites: GSTR 203 or GSTR 210 and sophomore standing*

This course invites students to imagine and consider Christianity from stances both inside and outside the faith, from the vantage of various disciplines, as an instance of the general phenomenon of religion, and as a way of understanding life's purpose and meaning that remains important for many around the world. All sections explore together some historical understandings of Christianity, and then individual sections each explore a selected contemporary issue in light of historical and biblical perspectives. Each section applies and builds on the reasoning, research, and writing emphases of GSTR 110 and 210.

GSTR 332 SCIENTIFIC KNOWLEDGE AND INQUIRY **1 Course** *Prerequisites: Practical Reasoning with Quantitative Emphasis (PRQ) and sophomore standing*

This course invites all students to explore a variety of scientific disciplines in order to understand what science is, does, and tells us about the natural world around us. Employing an integrative approach to the natural sciences, the course emphasizes the historical development of laws, models, and theories, as well as basic scientific literacy important to contemporary concerns. Each section of the course includes inquiry-based learning (lab) experiences.

GSTR 410 SENIOR SEMINAR IN CONTEMPORARY GLOBAL ISSUES **1 Course**

Prerequisites: GSTR 310, GSTR 332, and senior standing (or 24 credits for students under the old General Education curriculum)

As a capstone experience for General Education, this course invites students to synthesize and integrate their learning by using their developing abilities to reason, research, and communicate to investigate aspects of a significant issue for the world today. Each section explores a topic determined by the instructors, and is structured to model broadly multi-disciplinary approaches needed to understand complex problems. Each section involves faculty working closely with student's independent research leading to presentation of a project to others in the course.

GST 101 STRATEGIES FOR ACADEMIC SUCCESS **1/4 Course**

A course designed to provide students with the necessary academic skills to achieve success in their academic and collegiate careers. Course requirements will be determined by the course coordinator.

GST 117 CHRISTMAS COUNTRY DANCE SCHOOL **1/4 Course**

An intensive experience designed to increase skills and understanding in the teaching of Appalachian, English, Danish, and American dance and song. One week of full-time instruction and practice. This course may be repeated for credit.

GST 121 APPALACHIAN CULTURE **1 Course**

A study designed to give Appalachian students an opportunity to establish their own identity and give others a base for understanding Appalachian people, by exploring the values, attitudes, strengths, and problems of Appalachian people. This course also is aimed at providing a foundation for further study and involvement in Appalachia.

GST 150 COLLEGE COMPOSITION **1 Course**

This course is an intensive study and practice of forms, conventions, and processes of academic discourse, with particular attention to critical thinking; analytic and argumentative writing; research and source use; and effective language use. This course is designed for students who need more focused instruction in writing in order to meet the expectation of academic assignments. Meets four hours per week, with additional individual sessions arranged with the instructor.

GST 210 SUSTAINABLE APPALACHIAN COMMUNITIES (also SENS) **1 course**

Prerequisite: GSTR 203 or GSTR 210

See SENS 210 for course description. This course may be applied toward the Appalachian Studies minor and the Sustainability and Environmental Studies minor.

GST 215 CLASSICAL MYTHOLOGY (also LAT) **1 Course**

See LAT 215 for course description. This course may be used to meet the Arts Perspective and the Religion Perspective,

GST 222 INTRODUCTION TO AFRICAN-AMERICAN STUDIES (also AFR) 1 Course

Prerequisite: GSTR 100 or GSTR 110

With an emphasis on the humanities and social sciences, this interdisciplinary course provides an opportunity for students to evaluate the historical contributions and contemporary status of African-Americans. Beginning with an historical overview, the course surveys the following topics: social institutions, creative productions, political economy and social class, personal identity and ethnicity, and contemporary status. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

GST 229 APPALACHIAN PROBLEMS AND INSTITUTIONS 1 Course

Prerequisite: GSTR 100 or GSTR 110

A study of Appalachian problems and opportunities and of how regional institutions relate to these problems and opportunities. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

GST 230 AFRICAN AMERICANS IN APPALACHIA (also AFR) 1 Course

Prerequisite: GSTR 100 or GSTR 110

See AFR 230 for course description.

GST 235 INTRODUCTION TO BEHAVIORAL SCIENCES 1 Course

Prerequisite: GSTR 100 or GSTR 110

An introduction to the application of the scientific method to the realm of human behavior at all levels. Students will learn about general frameworks for understanding and examining the distinctive approaches of the disciplines of psychology, sociology, and anthropology. The course will emphasize active inquiry and help students to become familiar with the methods characteristic of each of these particular disciplines. This course may be used to meet the Social Science Perspective and the Practical Reasoning (PR) Option.

GST 236 FOLK ARTS AS A CULTURAL EXPRESSION 1 Course

A study of traditional folk arts in a cultural setting, with particular attention to Appalachian traditions and their importance in the lives of people. The Appalachian arts of storytelling, folk singing, folk dancing, and handcrafting will be explored, an experience in each art will be arranged, the major contributors to the recent evolution in folk arts will be studied and the potential of folk arts in modern society will be examined.

GST 244 SERVICE, CITIZENSHIP, AND INJUSTICE (also WST) 1 Course

Prerequisite: GSTR 203 or GSTR 210

See WST 244 for course description. This course is an elective for the Women's Studies major and minor.

GST 186/286/386/486 SPECIAL TOPICS 1/2 or 1 Course

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

GST 390/490A or B INDEPENDENT STUDY **1 Course**

*Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.*

GST 395/495 INTERNSHIP **1 to 3 Courses**

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

GST 397/497A or B TEAM INITIATED STUDY **1 Course**

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.*

GST 398/498 DIRECTED STUDY **1 Course**

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

HISTORY

HIS 101 WESTERN CIVILIZATION I **1 Course**

An introduction to the ideas and events that shaped the Western world from its beginnings in the ancient Near East to the 15th century. The course emphasizes the study and interpretation of primary documents, viewed within an historical context. This course may be used to meet the Western History Perspective. **NOTES:** Strongly recommended for the first or sophomore year. Noncredit for students who have received credit for HIS 226.

HIS 102 WESTERN CIVILIZATION II **1 Course**

A survey of major cultural, scientific, and technological developments from the 15th century to 1945, and their interaction with social, political, and organizational structures. **NOTES:** Strongly recommended for the first or sophomore year. Noncredit for students who have received credit for HIS 227.

HIS 122 INTRODUCTION TO CHINA (also AST) **1 Course**

China has one of the foundational civilizations in human history. It gave rise to social structures, political systems, and philosophies that deeply influenced the development of East Asia. Through close reading of documents, focused analytical writing, open discussion, and lecture, students will develop our own understanding of the evolution of China from its Neolithic origins to its present status as a world power. This course may be used to meet a World Culture (Non- Western) component of the International Perspective.

HIS 123 INTRODUCTION TO JAPAN (also AST) **1 Course**

Japan has developed from an isolated chain of islands at the edge of East Asia into a modern economic giant. Through close reading of documents, focused analytical writing, open discussion, and lecture, we will examine the complexity of the culture that gave rise to Zen Buddhism, the samurai, and Japan's current position as one of the world's most powerful economies.

HIS 140 HISTORY OF SPAIN (also SPN)

1 Course

See SPN 140 for course description.

HIS 161 AMERICAN HISTORY TO 1865

1 Course

A survey of American history from its beginnings through the War Between the States, with emphasis on political, social, cultural, economics, and military trends, and on the ways in which unified American civilization is created from diverse elements. This course may be used to meet the Western History Perspective.

HIS 162 AMERICAN HISTORY SINCE 1865

1 Course

A survey of American history since the War Between the States, with emphasis on political, social, cultural, economic, and military trends, and on the ways in which unified American civilization is created from diverse elements.

HIS 165 INTRODUCTION TO AFRICAN AMERICAN HISTORY (also AFR) 1 Course

This course surveys the formation of African American cultural identity from the early National period to the present. This course will touch upon major formative events in African American history: slavery, the early formation of African American cultural institutions, the reconstruction of African American life after slavery, northern migration during the World Wars, the civil rights and black power movements of the 1950s and 1960s, and urbanization and class structure in the 1980s and 1990s. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and the Western History Perspective.

HIS 200 INTRODUCTION TO HISTORICAL STUDY

1 Course

An introduction to history as a scholarly discipline; a way of studying one aspect of human experience. It includes examination of various kinds of sources and how they are handled, principles of research, the collection of data and use of quantitative analysis, historical reasoning, interpretation and synthesis, the history of historical study, and issues raised by contemporary concerns about the uses of history. Should be taken by majors not later than the sophomore year. This course may be used to meet the Social Science Perspective.

HIS 201 AMERICAN POLITICAL THOUGHT (also PSC)

1 Course

See PSC 201 for course description.

HIS 209 CLASSICAL GREEK CIVILIZATION

1 Course

Prerequisite: GSTR 203 or GSTR 210

History of Greece from its earliest period through the conquests of Alexander the Great, with emphasis on political and cultural forces.

HIS 210 CLASSICAL ROMAN CIVILIZATION (also LAT)

1 Course

Prerequisite: GSTR 203 or GSTR 210

History of Rome from its foundations to 476 A.D., with emphasis on political, social, economic, and religious forces.

HIS 215 HISTORY OF CHRISTIANITY TO 1600 (also REL) 1 Course

Prerequisite: HIS 101 or 226; or GSTR 220 or sophomore standing

A general survey of the development of Christianity from apostolic times through the 16th-century Reformations. Emphasis is on Western Christianity, the development of beliefs, practices, and institutions, and Christianity's interaction with society and culture.

HIS 219 HISTORY OF THE BRITISH ISLES 1 Course

A general survey of the political, social, economic, and cultural history of the British Isles from ancient times to the present. Emphasis will be put on the interaction and diversity of the four regions (England, Scotland, Wales, and Ireland) and their relations with other regions. This course may be used as credit toward the minor in Appalachian Studies.

HIS 222 MODERN EAST ASIA (also AST) 1 Course

Prerequisite: HIS 122 or 123; or GSTR 221 or sophomore standing

Prior to 1800, East Asia stood as a powerful cultural and economic zone that had been little influenced by Western culture. The 1800s mark the growing conflict between East and West. The key nations in East Asia (China, Japan, Korea, and Vietnam) all met the challenge of the West with different outlooks and different results. Through close reading, analytical writing, and open discussion, we will come to understand the impetus for modernization in East Asia and assess the varying degrees of success achieved by East Asian nations in this regard. This course may be used to meet a World Culture (Non-Western) component of the International Perspective.

HIS 224 20TH-CENTURY WORLD HISTORY 1 Course

Prerequisite: GSTR 100 or GSTR 110

Offered: Typically alternate years (first offered Fall 2006)

This course is an examination of major world developments from 1900 to 2000. Topics include colonialism; the two World Wars; political experimentation in the interwar years; the Cold War; the demise of political imperialism; nation-building in Africa, Asia, and South America; globalization; the fall of Soviet-based communism; and challenges to nationalism and the nation-state, including the rise of political regionalism, environmental sustainability, human rights, and terrorism. This course may be used to meet a World Culture (Western) component of the International Perspective.

HIS 228 GENDER IN THE MODERN WEST, 1750-PRESENT (also WST) 1 Course

Prerequisite: HIS 101, 102, 226, 227, GSTR 203, or 210

This course compares the experiences of women and men to determine how gender roles have contributed to and been shaped by the political and social history of Europe and the United States. The class is arranged topically and chronologically from the Enlightenment through the success of the parity movement in France at the beginning of the 21st century. Topics to be considered include: national revolutions, industrialization and the sexual division of labor, widening political opportunities, socialism, feminism, racism, and warfare.

HIS 229 MODERN IMPERIALISM (also AST)**1 Course**

Prerequisite: HIS 102, 122 (also AST), 123 (also AST), 227, GSTR 203, or 210

This course is a selective exploration of imperialism using a comparative historical perspective. Beginning with a reflection on the meanings of “empire,” the course explores the rise of European empires during the “high colonialism” of the 19th and 20th centuries. This course then will explore the expansion of European colonialism and regional responses- including local resistance, national revolutions, and the development of the Soviet and Japanese Empires. After examining the dynamics of imperial decline between 1919 and 1945, the course will conclude by considering the status of empires in the post-World War II period. This course may be used to meet a World Culture (Western) component of the International Perspective.

HIS 253 APPALACHIAN AMERICA**1 Course**

Prerequisite: GSTR 100 or GSTR 110

A broad survey of the history of the Appalachian region. This course may be used to meet the African Americans’, Appalachians’, and Women’s Perspective and the Western History Perspective.

HIS 260 SURVEY OF AFRICAN HISTORY (also AFR)**1 Course**

Prerequisite: GSTR 100 or GSTR 110

See AFR 260 for course description. This course may be used to meet a World Culture (Non- Western) component of the International Perspective.

HIS 270 THE RECENT HISTORY OF THE MIDDLE EAST**1 Course**

Prerequisite: GSTR 100 or GSTR 110

A survey of the recent history of the Middle East including political, economic, and religious factors important to the region.

HIS 311 SEMINAR IN MEDIEVAL EUROPEAN CIVILIZATION**1 Course**

Prerequisite: HIS 101 or 226; or GSTR 220 or junior standing

Through examination of a key period or topic in the history of Medieval Europe (5th through 14th centuries, A.D.), students will develop both a deeper appreciation of this distinctive civilization and its relations to its neighbors, and better understand the sources and methodologies historians use to analyze the human experience in a past era. By reading key primary documents and secondary materials from important historians, they will develop a picture of the way social, economic, political, and cultural issues interact and shape a period. May be repeated for credit, provided the topic differs from those previously studied.

HIS 314 RENAISSANCE AND REFORMATION**1 Course**

Prerequisite: HIS 102 or 227; or GSTR 221 or junior standing

An examination of the European experience from the late 14th to the late 16th century, including the Renaissance in Italy and trans-alpine Europe, the Religious Reformation of the 16th century, and the resultant diversification of Western Christianity, and the impact of European contact and interaction with the Non-Western world.

**HIS 315 19TH-CENTURY EUROPE: REVOLUTIONS
AND INDUSTRIALIZING NATIONS**

1 Course

Prerequisite: HIS 102, 200, or 227, GSTR 221, or junior standing

This course examines the history of Europe from the French Revolution, which signaled the end of the Old Order, to the outbreak of World War I, which led to the end of European primacy in the world. Major themes for the years 1789 through 1848 include the first and second industrial revolutions, the decline of aristocratic hegemony, the emergence of new ideologies (especially nationalism, liberalism, and socialism), and the rise of the bourgeoisie. After 1870, principal themes include domestic politics, culture in Europe's golden age, and increasing national rivalry and competition.

HIS 316 20TH-CENTURY EUROPE: DIVISION AND RECONCILIATION

1 Course

Prerequisite: HIS 102, 200, 227, GSTR 203, or 210

This course explores major political, social, economic, and cultural developments in 20th-century Europe. Topics include the First World War and its aftermath, the Russian Revolution, Stalinism, Fascism, and Nazism, the Second World War, the origins of the Cold War; life in a divided Europe in the post-1945 period, the collapse of Soviet-based communism; and the Balkan Wars in the 1990s. The course combines a survey of broad historical movements with focused examination of specific case studies.

HIS 322 SEMINAR IN CHINESE HISTORY (also AST)

1 Course

Prerequisite: HIS 122 or 123; or GSTR 221 or junior standing

The goal of this course is two-fold. Through examining a key period in Chinese history students both will develop a deeper appreciation for Chinese culture and a better understanding for the various methodologies that historians employ in analyzing complex societies. By reading key primary documents and secondary material from important historians, we will develop a picture of the way social, economic, political, and cultural issues interact and shape the period. May be repeated for credit, provided the topic differs from that previously studied.

HIS 323 SEMINAR IN JAPANESE HISTORY (also AST)

1 Course

Prerequisite: HIS 122 or 123; or GSTR 221 or junior standing

The goal of this course is two-fold. Through examining a key period in Japanese history we will both develop a deeper appreciation for Japanese culture and a better understanding for the various methodologies that historians employ in analyzing complex societies. By reading key primary documents and secondary material from important historians, we will develop a picture of the way social, economic, political, and cultural issues interact and shape the period. May be repeated for credit, provided the topic differs from that previously studied. This course may be used to meet a World Culture (Non-Western) component of the International Perspective.

HIS 335 TOPICAL SEMINAR IN MODERN EUROPEAN HISTORY **1 Course**

Prerequisite: HIS 102, 200, or 227, GSTR 203, or 210

This course examines a specific topic in the history of Modern Europe in an effort to develop both a deeper appreciation for the complexity of the past and an understanding for the various methodologies that historians employ. By reading primary documents and secondary materials, students will develop an understanding of the way social, economic, political, and cultural issues interact and shape a period. May be repeated for credit, provided the topic differs from those previously studied. **NOTE:** Certain sections of this course also will supplement the Women's Studies and Asian Studies programs, as well as being suited to General Education's African Americans', Appalachians', and Women's Perspective, International Perspective, and Western History Perspective, depending upon each section's focus. Refer to the *Schedule of Classes* and BOND to see which sections meet perspective areas.

HIS 356 SEMINAR IN AFRICAN AMERICAN HISTORY (also AFR) **1 Course**

Prerequisite: HIS 161 and 162, or HIS 165 (also AFR)

Through examination of a key period in African American history, students will develop a deeper appreciation of this history and a better understanding of sources and methodologies historians use to analyze past human experiences. By reading key primary and secondary materials, students will develop an understanding of the way cultural, social, economic, and political issues interact to shape the period. May be repeated for credit, provided the topic differs from that previously studied.

HIS 406 ADVANCED TOPICS IN HISTORY **1 Course**

Prerequisite: HIS 200 and senior standing, or junior standing with permission of instructor

The capstone course for the History major. A study of problems, conflicting interpretations involving specific periods, major writings or classical writings of history. May be repeated for credit, provided the topic differs from that previously studied.

HIS 186/286/386/486 SPECIAL TOPICS **1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

HIS 390/490A or B INDEPENDENT STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

HIS 395/495 INTERNSHIP **1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

HIS 397/497A or B TEAM INITIATED STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

HIS 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

LSC

LSC 390/490A or B INDEPENDENT STUDY

1 Course

*Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.*

LSC 395/495 INTERNSHIP

1 to 3 Courses

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

LSC 397/497A or B TEAM INITIATED STUDY

1 Course

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.*

MATH

MAT 010 PRE-ALGEBRA

Noncredit Course

This course is designed for students who need to review and master pre-algebra topics, including computation of whole numbers, decimals, fractions, and integers; ratio, proportion, and percent; and geometry. **NOTE:** This full-term course will provide students with one (1) load credit.

MAT 011 ELEMENTARY ALGEBRA I

Noncredit Course

Prerequisite: Completion or waiver of MAT 010

This course is designed for students who need to review and master the first half of the elementary algebra topics, including a review of the MAT 010 topics; solving linear equations and inequalities; negative exponents; scientific notation; operations with polynomials; factoring polynomials; and operations with rational expressions. **NOTE:** This full-term course will provide students with one (1) load credit.

MAT 012 ELEMENTARY ALGEBRA II

Noncredit Course

Prerequisite: Completion or waiver of MAT 011

This course is designed for students who need to review and master the second half of the elementary algebra topics, including a review of the MAT 011 topics; graphing linear equations and inequalities; basic problem solving with one and two variables; solving linear systems of equations; function notation; domain and range; rational exponents; roots; radicals; an introduction to quadratic functions; and study skills needed for mathematics. **NOTE:** This full-term course will provide students with one (1) load credit.

MAT 101 MATHEMATICAL MODELING USING THE COMPUTER**1 Course***Prerequisite: Completion or waiver of MAT 012*

This course provides an introduction to computers and to mathematical modeling of problems from the real world with an emphasis on using the computer as a flexible problem-solving, predictive, and exploratory tool. A selected computer-application package is studied in depth and used to explore a variety of applied examples. This computer package may vary from section to section. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. **NOTE:** Noncredit for students who have completed or waived MAT 108, MAT 110 (no longer offered at Berea), MAT 115, or MAT 220.

MAT 104 INTRODUCTION TO STATISTICS**1 Course***Prerequisite: Completion or waiver of MAT 012*

This course is designed for students with little mathematics background who wish to gain experience with the basic concepts of statistics and their applications. Topics include graphic representations of data; measures of central tendency and variability; linear regression and correlation; probability; sampling distributions; estimation using confidence intervals; and significance testing. This course is not intended for Mathematics majors and is noncredit for anyone with credit in ECO 250 or MAT 311. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 105 INTRODUCTION TO DISCRETE MATHEMATICS**1 Course***Prerequisite: Completion or waiver of MAT 012*

Discrete mathematics is that branch of mathematics that deals with arrangements of distinct objects. The course will focus on three basic questions related to these arrangements: the existence of such arrangements, the counting of such arrangements, and the selection of a “best” arrangement based upon some criterion. Techniques from this branch of mathematics have application in a wide variety of practical everyday situations, such as how to find the best route for snowplows in a city or what voting method would best represent the will of the voters. Other useful applications include how to count the number of different possible combinations of color and type of a marketed product, how best to schedule a list of tasks to be done, and how to view game theory as a model of social interaction. Discrete mathematical models are used by decision makers in our society, from workers in government to those in health care, transportation, and telecommunications. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

**MAT 108 ENVIRONMENTAL ISSUES:
A MATHEMATICAL MODELING APPROACH****1 Course***Prerequisite: Completion or waiver of MAT 012*

The state of the planet will be discussed from differing points of view. Local and global issues such as air, land, and water pollution; energy production and consumption; forest, wetland, and other resource management; and waste disposal will be considered. Mathematical models will be developed and explored on the computer in order to make predictions and to consider solutions regarding the environmental problems that face our world. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. **NOTE:** Noncredit for students who have completed or waived MAT 101, 110, 115, or 220.

MAT 115 COLLEGE ALGEBRA WITH MODELING**1 Course***Prerequisite: Completion or waiver of MAT 012*

This course offers a study of algebraic functions and their uses in mathematical modeling. Topics will include the real-number system; basic concepts of functions and graphs; linear, polynomial, rational, exponential, and logarithmic functions and models; and the solutions of systems of linear equations. Applications to various disciplines will be investigated through the development and analysis of mathematical models. Computer graphics and computational packages will be introduced to aid in the analysis of selected applications. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. **NOTE:** Noncredit for students who have completed or waived MAT 220.

MAT 125 TRIGONOMETRY WITH APPLICATIONS**1 Course***Prerequisite: Completion or waiver of MAT 115*

This course offers a study of trigonometry and trigonometric functions. Topics will include a review of basic concepts of functions and graphs; trigonometric functions; analytic trigonometry; trigonometric equations; and polar coordinates and vectors. Applications of trigonometry will be investigated through the development and analysis of mathematical models. Computer graphics and computational packages will be introduced to aid in the analysis of selected applications. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

**MAT 201 THE FOUNDATIONS AND TEACHING OF
ELEMENTARY MATHEMATICS I****1 Course***Prerequisite: Completion or waiver of MAT 012*

This course will be a study of basic ideas of sets, operations on sets, the counting numbers, and the extension of the numbers to include the rational and real number systems. Throughout the course, the emphasis will be on understanding ideas in mathematics through problem solving and the use of manipulatives, and using this understanding to investigate and develop strategies for teaching elementary mathematics. Observing and teaching children are required for all students enrolled.

**MAT 202 FOUNDATIONS & TEACHING OF
ELEMENTARY MATHEMATICS II****1 Course***Prerequisite: Completion or waiver of MAT 012; MAT 201 with a grade of C or higher*

This course is a continuation of MAT 20 I. Topics in mathematics to be covered include: definitions, axioms, similarity, congruence, areas, and volumes. Throughout the course, the emphasis will be on understanding ideas in mathematics through problem solving and the use of manipulatives, and using this understanding to investigate and develop strategies for teaching elementary mathematics. Observing and teaching children are required of all students enrolled.

MAT 220 CALCULUS I**1 Course**

Prerequisite: A knowledge of trigonometry and MAT 110, 112, or 125 (MAT 110 and 112 are no longer offered at Berea) with a grade of C or higher, or exemption from same on the basis of placement test

A study of analytic methods in geometry precedes an introduction to differential and integral calculus. Main topics include exponential, logarithmic, and trigonometric functions, limits, continuity, differentiation, integration, and applications of differential calculus. Graphing calculators will be introduced and used in the analysis of selected problems. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 225 CALCULUS II**1 Course**

Prerequisite: MAT 220 with a grade of C or higher

This course is a continuation of MAT 220. Main topics include the definite integral, applications of the definite integral, integration techniques, numerical integration, and indeterminate forms.

Microcomputer graphics and computational packages will be introduced and used in the analysis of selected problems. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 308 THE TEACHING OF MATHEMATICS**1 Course**

Prerequisite: Permission of instructor

This course is designed to acquaint prospective secondary-school teachers with the issues affecting the teaching of mathematics including theory, research, content, and methodology; the resources available to assist them in teaching mathematics; and the NCTM's Professional Standards. Particular emphasis will be given to the use of manipulatives, technology, problem solving, and cooperative learning in the teaching of mathematics. Observing and teaching youths are required of all students enrolled.

MAT 311 PROBABILITY**1 Course**

Prerequisite: MAT 220 with a grade of C or higher; MAT 225 or concurrent enrollment; or permission of instructor

Offered: Typically alternate Fall Terms (next offered Fall 2006)

This course is designed to provide a solid foundation in probability theory. The student should gain an understanding to mathematical concepts and techniques necessary to study statistical inference. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 312 OPERATIONS RESEARCH**1 Course**

Prerequisite: MAT 220 or permission of instructor

Operations Research is an applied area employing both mathematics and computer science in addressing certain kinds of decision problems arising in a wide variety of disciplinary and professional contexts. The goals of the course will be to develop skills in identifying typical problems; formulating, solving, and interpreting appropriate models; and developing interactive feedback with the problem environment. Topics include linear programming and network formulations; the simplex algorithm and its computer implementation; sensitivity analysis; duality; network algorithms; and dynamic programming. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 314 LINEAR ALGEBRA**1 Course***Prerequisite: MAT 220 or permission of instructor*

This course is intended for students interested in acquiring some familiarity with an abstract mathematical structure that is rich with applications in other areas of mathematics and in the social and physical sciences. Topics to be studied include vector spaces, linear transformations, and matrices. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 315 FUNDAMENTAL CONCEPTS OF MATHEMATICS**1 Course***Prerequisite: MAT 220*

This course is designed to acquaint students with some of the concepts and methods fundamental to all areas of mathematics. Topics will include set theory, relations, functions, logic, methods of proof, cardinality, and selected properties of the real number system. This course may be used to meet the Practical Reasoning (PR) Option.

MAT 321 FOUNDATIONS OF GEOMETRY**1 Course***Prerequisite: MAT 315*

This course will include an overall view of the structure of geometry evolving from the basic axioms of Euclidean geometry. The interrelationships between various geometries such as affine, neutral, hyperbolic, projective, elliptic, and others will be studied, as well as some of the easier, important results of each. Because this material is necessary for a good understanding of Euclidean geometry, it is important that those students considering a high-school teaching career in mathematics enroll in this course.

MAT 330 CALCULUS III**1 Course***Prerequisite: MAT 225 with a grade of C or higher*

This course is a continuation of MAT 225. Main topics include infinite series, three dimensional vectors, space, curves, solid analytic geometry, differential calculus of several variables, and multiple integration. Microcomputer graphics and computational packages will be introduced and used in the analysis of selected problems. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 432 ABSTRACT ALGEBRA**1 Course***Prerequisite: MAT 315 and 330 or permission of instructor*

A course designed to introduce students to the methods and topics essential to the study of algebraic structure and its implications. An introduction to group theory will serve to launch an investigation of more highly structured algebras such as rings, integral domains, and fields.

MAT 433 NUMERICAL ANALYSIS (also CSC)**1 Course***Prerequisites: MAT 225; one course chosen from CSC 205, 206, or 306; and one course chosen from MAT 314, 315, or 330*

This course is designed for students who are concerned with the development of approximation methods and their use in locating roots of equations, interpolation, numerical differentiation, numerical integrations, and solution of systems of linear equations.

MAT 434 REAL ANALYSIS**1 Course***Prerequisite: MAT 315 and 330, or permission of instructor*

Basic algebraic and topological properties of the real number system will be established and then applied to the study of such concepts as limit, continuity, differentiation, integration, and infinite series.

MAT 435 COMPLEX ANALYSIS**1 Course***Prerequisite: MAT 330*

The main objective will be to study functions of a complex variable. The study will draw heavily on the student's previous experience with functions of a real variable. Topics will include the complex numbers differentiation and integration of functions of a complex variable; power series representation; analytic functions; and the calculus of residues.

MAT 436 TOPOLOGY**1 Course***Prerequisite: MAT 315 and 330, or permission of instructor*

Topological spaces will be approached by abstracting from a preliminary study of metric spaces. Topics in metric and/or topological settings include open and closed sets; open base and subbase; first and second countability; dense sets; continuity; metrizable; and compactness, connectedness, and separation properties.

MAT 437 DIFFERENTIAL EQUATIONS**1 Course***Prerequisite: MAT 330*

This course provides an introduction to both pure and applied aspects of differential equations. Topics to be studied include first-order equations, second-order linear equations, oscillation theory, power-series solutions, systems of first-order equations, nonlinear equations, and numerical methods. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

MAT 438 STATISTICS**1 Course***Prerequisite: MAT 311 and 330*

This course is a continuation of MAT 311. The student should gain an appreciation of the nature, scope, and theoretical basis of methods of statistical inference. Topics will include estimation, hypotheses testing, and linear regression. Applications will be discussed.

MAT 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course***Prerequisites: Determined by instructor**See p. 54 of this Catalog.***MAT 390/490A or B INDEPENDENT STUDY****1 Course***Prerequisite: Sophomore or junior standing for 390; senior standing for 490**See pp. 54-55 of this Catalog.*

MAT 492 SENIOR MATHEMATICS SEMINAR**1/4 Course***Prerequisite: Permission of instructor and senior standing*

During the senior year, each Mathematics major is required to register for this course. Each student's project will begin with a lead paper provided by a faculty-resource person. The project will involve preparation of a 4-10 page research paper and will conclude with an oral presentation. Successful completion of this course will satisfy the major's field-writing requirement.

MAT 395/495 INTERNSHIP**1 to 3 Courses***Prerequisite: Sophomore, junior, or senior status**See p. 55 of this Catalog.***MAT 397/497A or B TEAM INITIATED STUDY****1 Course***Prerequisite: Sophomore or junior standing for 397; senior standing for 497**See pp. 54-55 of this Catalog.***MAT 398/498 DIRECTED STUDY****1 Course***Prerequisite: Will vary, but always will include permission of instructor**See p. 55 of this Catalog.***COMPUTER SCIENCE****CSC 205 INTRODUCTION TO COMPUTER SCIENCE****1 Course***Prerequisite: Any course approved to meet Practical Reasoning (PR) or Practical Reasoning with Quantitative Emphasis (PRQ)*

This course will introduce the student to major themes of computer science, including computer usage in application programs, an exploration of computer hardware, and computer control through computer programming. Constructs of computer programming, such as representation of numbers and usage of variables, as well as assignment, conditional, and repetition statements, will be covered. Students will learn to program in HTML to create Web pages. Common application environments such as the spreadsheet and database will be discussed, and an additional programming language will be selected to further explore these themes.

CSC 206 INTRODUCTION TO ROBOTICS**1 Course***Prerequisite: Any course approved to meet Practical Reasoning (PR) or Practical Reasoning with Quantitative Emphasis (PRQ)*

Robots often perform tasks that are too dull, too dirty, or too dangerous for humans. Robots entertain us, clean our houses, mow our lawns, build our cars, fight our wars, perform surgery on our bodies, dive to the bottoms of the deepest oceans on our planet, and visit distant planets in our galaxy. This course introduces the fundamental concepts of robotics. Topics include how robots move, sense, and perceive the world around them. Students will construct and program robots in laboratory sessions. No previous computer programming or electronics experience is necessary. This course may be used to meet the Practical Reasoning (PR) Option.

CSC 303 THEORY OF COMPUTATION **1 Course**

Prerequisite: CSC 205, 206, 306, or MAT 220

An introduction to the fundamental ideas and the basic paradigms of computer science, the very foundation on which to base one's thinking about computers now and in the future. This course will address some of the following topics in the theory of computation-the theory of automata and formal languages, computability by a Turing machine, and computational complexity. Computational tasks that cannot be solved on any computer or tasks where there is no practical, reasonably fast algorithm to solve them will be considered. The perspective here is from that of computing, but the treatment is mathematical in nature.

CSC 306 INTRODUCTION TO PROGRAMMING WITH C++ **1 Course**

Prerequisite: CSC 205 or 206; or permission of instructor

This course will be concerned with an introduction to the C language, emphasizing structured programming. The course will include pseudocode and stepwise refinement as means of algorithm development. Other programming topics will include data types, arrays, structures, functions, and files. **NOTE:** This course is noncredit for anyone who has completed CSC 320.

CSC 320 ALGORITHMS, OBJECTS, AND DATA ABSTRACTIONS **1 Course**

Prerequisite: CSC 306 with a grade of C or higher

This course continues the introduction to the methodology of programming from an object-oriented perspective with an emphasis on algorithms, data structures, and software engineering.

CSC 325 OPERATING SYSTEMS WITH AN EMPHASIS ON UNIX **1 Course**

Prerequisite: CSC 306 with a grade of C or higher; or permission of instructor

This course will introduce the main concepts from both traditional and distributed operating systems. Topics will include: goals, structural concepts, process management, memory management, storage management, and security issues. Examples will be drawn from a variety of operating systems, but the majority of the examples will come from the UNIX system.

CSC 330 DATABASE SYSTEMS **1 Course**

Prerequisite: CSC 306 with a grade of C or higher

An introduction to the use and operating principles of database management systems. Topics covered include: data entities and relationships; data modeling using entity-relation diagrams: hierarchical, network and relational models of databases; the SQL query language; relational algebra and calculus as applied to the design of databases; security and integrity in the context of concurrent use; and ethical issues associated with database design and use.

CSC 433 NUMERICAL ANALYSIS (also MAT) **1 Course**

*Prerequisite: MA T 225; one course chosen from CSC 205, 206, or 306; **and** one course chosen from MAT 314, 315, or 330*

See MAT 433 for course description.

CSC 186/286/386/486 SPECIAL TOPICS **1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

CSC 390/490A or B INDEPENDENT STUDY **1 course**

*Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.*

CSC 492 SENIOR SEMINAR **1/4 Course**

Prerequisite: By permission of instructor

The main goal of this course is to introduce students to research topics in computer science. Students first will read selected articles relating to computer science, then will write a formal paper and give a formal presentation on this material. Emphasis will be placed on developing reading comprehension in computer science beyond the textbook level, and on developing effective methods of communicating this information.

CSC 395/495 INTERNSHIP **1 to 3 Courses**

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

CSC 397/497A or B TEAM INITIATED STUDY **1 Course**

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.*

CSC 398/498 DIRECTED STUDY **1 Course**

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

MUSIC

MUS 106 WORLD MUSIC **1 Course**

This course will examine the music within four cultures: Native America, India, Africa, and African-America. The music of each culture will be examined within the context of its history, peoples, and traditions. Musical examples, videos, oral presentations, class demonstrations, and special programs/concerts will be included. Students also will attend several College convocations and discuss, compare, and reflect on the various music cultures and experiences. This course may be used to meet the Arts Perspective and a World Culture (Non-Western) component in the International Perspective. **NOTE:** Noncredit for students who have completed this course as GSTR 109.

MUS 115 INTRODUCTION TO MUSIC LITERATURE **1 Course**

An introduction to the study of music literature. Students in this course will be introduced to significant musical pieces from the major historical periods and will learn to distinguish the musical stylistic characteristics of those periods. Emphasis will be on the development of listening skills and appropriate methods and abilities to analyze, interpret, discuss, and write about music. Although the focus of the literature will be music from the Western art music tradition, selected examples of music from other world cultures will be included. May include required attendance of live musical performances on campus or in the region, as available and appropriate. Four periods per week.

MUS 118 FUNDAMENTALS OF MUSIC**1 Course**

An introduction to reading music, including musical symbols and terminology, rhythm and meter, scales, key signatures, intervals, and chords. Both written and aural skills are developed. Simple musical forms and music literature are included. Designed particularly for: prospective Music majors and minors who need further development of fundamental written and/or aural skills in music in preparation for courses in the Materials of Music and Aural Harmony sequence. This course also is open to the general College student who wishes to develop fundamental knowledge and skills in music.

MUS 120 MATERIALS OF MUSIC I**1/2 Course**

Prerequisite: Permission of instructor

Beginning a four-term sequence of courses in the theoretical approach to music, this is a study of the properties of sound, the overtone series, symbols of notation, rhythm, intervals, scales, and key signatures. Harmonic studies include triads and their inversions, phrase structure and cadences, and harmonic progressions. The course will focus on playing major and minor scales, all triad types and their inversions, and basic chord progressions using primary triads. Two class periods per week plus a keyboard lab. Usually taken in conjunction with MUS 121.

MUS 121 AURAL HARMONY I**1/2 Course**

Prerequisite: Permission of instructor

The relationship between the printed musical symbol and its auditory representation. The “musical ear” is developed through the sight-singing of simple melodies, intervals, scales, and rhythmic patterns. Brief exercises in melodic and rhythmic dictation and conducting patterns. Three periods per week. Usually taken in conjunction with MUS 120.

MUS 216 PERCEPTIVE LISTENING TO MUSIC**1 Course**

A study of one or more of the arts, or of a particular medium, in a cultural, cross-cultural, or historical context. Attention will be given to form, structure, style, and other critical considerations. The course will have a research component. The primary focus of this course is the enhancement of the joy of listening to music through the development of music-listening skills in the framework of perceiving and understanding musical information. Emphasis on the attentive style of listening, the elements of music, and the variety of musical styles will be the three areas used to develop such a framework. This course may be used to meet the Arts Perspective. **NOTE:** Noncredit for students who have completed this course as GSTR 209.

MUS 224 APPALACHIAN MUSIC**1 Course**

An introduction to the music that has been, and is, an important part of the culture of the Southern Appalachian region. Specific musical elements will be discussed in relation to ballads and songs, instrumental music, bluegrass, country, and various types of religious music. The importance of the region’s music and musicians in the development of country and popular music in America is treated. Three periods per week. This course may be used to meet the Arts Perspective and the African Americans’, Appalachians’, and Women’s Perspective.

MUS 234 AFRICAN-AMERICAN MUSIC: AN OVERVIEW (also AFR) 1 Course

Prerequisite: GSTR 100 or GSTR 110

The study of African-American music and musicians within the general framework of American society, tracing the development of the music from its African origins to its impact upon and fusion with American music and culture. Although the main focus will be placed upon music indigenous to African-American culture, study will encompass significant African-American musicians in the European classical music tradition.

MUS 312 MATERIALS OF MUSIC II 1/2 Course

Prerequisite: MUS 120

Continuation of MUS 120. The study of non-harmonic tones, seventh chords, modulation, the four-part chorale style, and keyboard style. Music forms, introductory counterpoint, and analysis of works from music literature. Playing basic chord progressions using the secondary as well as primary triads, harmonizing simple melodies, simple transposition, and basic harmonic progressions in four parts. Two class periods per week plus a keyboard lab. Usually taken in conjunction with MUS 313.

MUS 313 AURAL HARMONY II 1/2 Course

Prerequisite: MUS 121

Continuation of MUS 121. Further studies in sight-singing; melodic and rhythmic dictation; harmonic backgrounds and part-singing; syncopation; and beginning harmonic dictation. Three periods per week. Usually taken in conjunction with MUS 312.

MUS 320 MATERIALS OF MUSIC III 1/2 Course

Prerequisite: MUS 312

Continuation of MUS 312. Seventh chords, altered chords, chromatic harmony, modulation, musical forms, and analysis of musical examples from the common practice period. Three periods per week. Usually taken in conjunction with MUS 321.

MUS 321 AURAL AND KEYBOARD HARMONY III 1/2 Course

Prerequisite: MUS 313

Continuation of MUS 313. Sight-singing of diatonic and chromatic melodies; use of computers in developing aural skills; melodic, rhythmic, contrapuntal, and harmonic dictation. Harmonizing melodies at the piano keyboard. Two periods per week. Usually taken in conjunction with MUS 320.

MUS 322 MATERIALS OF MUSIC IV 1/2 Course

Prerequisite: MUS 320

Continuation of MUS 320. Modulation to remote keys, chords of multiple thirds, larger musical forms, alternatives to traditional harmony, impressionism atonality, polytonality, serialism electronic music, minimalism, and new systems of notation. Analysis of late 19th-and 20th-century works. Creative writing in various styles. Three periods per week. Usually taken in conjunction with MUS 323.

MUS 323 AURAL AND KEYBOARD HARMONY IV**1/2 Course***Prerequisite: MUS 321*

Continuation of MUS 321. Sight-singing of modulating; modal, tonal, and atonal melodies; and melodic, contrapuntal and harmonic dictation. Continuation of computer usage in furthering aural skills. Keyboard skills include harmonization using diatonic and altered chords, transposition, chord symbols, improvisation, and figured bass. Preparation for Piano Proficiency Examination. Two periods per week, usually taken with MUS 322.

MUS 324 COMPOSITION**1/2 Course***Prerequisite: MUS 322*

Selected topics in composition are studied, such as texture; tonal and serial procedures; melody with accompaniment; and idiomatic writing for instruments and voices. Students use skills acquired through previous study of theory, harmony, and musical analysis in arranging and creating pieces in small and large forms. A weekly seminar (one hour) and individual conferences (one-half hour) focus on the creation of original works by students and detailed analysis of works that exemplify the selected topics. Students also will gain familiarity with computer programs in music notation and publishing. Individual assignments are made on the basis of each student's ability, training, and experience. May be repeated for credit with permission of instructor.

MUS 326 VOCAL METHODS**1 Course***Prerequisite: MUS 313 or permission of instructor*

A course in the fundamentals of singing and how these fundamentals may be used in effective instruction of students in a school's music program. A study of the vocal mechanism with special attention given to the physical and psychological aspects of vocal pedagogy. A study of methods appropriate to choral rehearsal. A survey of choral music history and of choral literature as it applies to the school music program at all levels.

MUS 328 TEACHING OF BRASS AND PERCUSSION INSTRUMENTS**1/2 Course***Prerequisite: Admission to Music or Music Education major; or permission of instructor*

A study of the materials, methods, literature, and pedagogy of brass and percussion instruments. Course requirements include reading and research assignments, examination of appropriate materials and equipment, a performance and teaching laboratory component, and practicum experiences. Three class meetings per week.

MUS 329 TEACHING OF WOODWIND INSTRUMENTS**1/2 Course***Prerequisite: Admission to Music or Music Education major; or permission of instructor*

A study of the materials, literature, and pedagogy of woodwind instruments. Course requirements include reading and research assignments, examination of appropriate materials and equipment, a performance and teaching laboratory component, and practicum experiences. Three class meetings per week.

MUS 330/331 MUSIC HISTORY I AND II**1 Course Each**

Prerequisites: Declared Music or Music Education major or Music minor; and MUS 312; or permission of instructor

An upper-level historical survey of Western music-Its styles, genres, composers, and works. A “music-centered” course, this survey will include analysis of representative works of the music literature. The music of classical Greece and the early Christian era through the Baroque, first term; the Classic era to the present day, second term. Four periods per week.

MUS 335 MATERIALS AND METHODS OF ELEMENTARY MUSIC**1 Course**

Prerequisite: Admission to Music or Music Education major; or permission of instructor

An introduction to philosophies, methodologies, and pedagogical foundations of teaching music in elementary schools, including those of Kodaly, Orff, Dalcroze, and Gordon. Course activities would include review of materials, assigned readings, research, class discussions, practical teaching laboratory sessions, and practicum experiences. Four meetings per week.

MUS 336 FUNDAMENTALS OF TEACHING INSTRUMENTAL MUSIC IN THE PUBLIC SCHOOLS**1 Course**

Prerequisites: Music majors only or by permission of instructor; EDS 250; and MUS 313

A course that provides an overview of the instrumental music-education profession, including the philosophy, methodology, and pedagogical foundations that are essential for successful teaching. The course is intended to assist the prospective instrumental music educator in the development of necessary musical, teaching, administrative, and personal skills. Four periods per week.

MUS 337 CONDUCTING**1 Course**

Prerequisite: MUS 313

Study and practice of beat patterns, baton technique, left-hand functions, cueing, pulse changes, recitative conducting, error detection, score reading, score marking, and other techniques used in instrumental and choral conducting. Practical experience. Concurrent participation in ensemble of major applied instrument (MUS 131, 132, or 135) is required for laboratory experience. Four periods per week.

MUS 340o ORGAN PEDAGOGY**1/2 Course**

Prerequisite: MUA (organ) 221 or permission of instructor

A study of instructional methods and materials used in teaching organ, as well as performance practices and problems. Each person enrolled in the course will teach lessons to two beginning organ students during the term, gaining practical experience in pedagogy. Two periods per week plus one hour teaching.

MUS 340p PIANO PEDAGOGY**1/2 Course**

Prerequisite: MUA (piano) 221 or permission of instructor

Lectures and discussion of teaching skills on all levels, in addition to a survey of methods and materials. Private and class teaching methods. Two periods per week.

MUS 341 STUDIO TEACHING**1/2 Course***Prerequisite: MUS 340p*

Supervised teaching of piano with related discussions in a weekly seminar. One-hour seminar, plus two periods of teaching per week.

MUS 342v VOCAL PEDAGOGY AND DICTION**1 Course***Prerequisite: MUA (voice) 326 or permission of instructors*

A study of the physiological functions involved in singing (breathing, phonation, etc.). Consideration of vocal methods, use of imagery in teaching, resonance, tone quality, placement, vocalization, diction (Italian, German, French, and English) including a working knowledge of the International Phonetic Alphabet (IPA), and interpretation. There will be many reading assignments, as well as listening to recordings and observing singers. Practical experience will be obtained by working with members of the voice class. Four periods per week: one day will be a laboratory experience.

MUS 350o ORGAN LITERATURE I**1/2 Course***Prerequisite: MUA (organ) 221 or permission of instructor*

A comprehensive introduction to organ literature, including the historical development of the organ. Characteristic forms, compositional styles, and the various "schools" of organ composition are traced from the Medieval through the Classic era. Representative organ works are heard live or through recordings made on historic instruments. Two periods per week.

MUS 350p PIANO LITERATURE I**1/2 Course***Prerequisite: MUA (piano) 221 or permission of instructor*

The study of the history and literature of piano music as it developed through the ages. Starting with the early national schools of keyboard music and progressing through the music of Beethoven, the course will deal with different phases of keyboard development, the more important musical forms, performance practice, and the significant piano music of the major composers of each era. Individual research, some informal performance in class by both the teacher and the student, as well as outside listening, will be included. Two periods per week.

MUS 351o ORGAN LITERATURE II**1/2 Course***Prerequisite: MUS 350o or permission of instructor*

A continuation of MUS 350o, with works from the Romantic period through the 20th century being played, heard, and discussed. The development of 19th- and 20th-century organs and their influence on compositional style. Two periods per week.

MUS 351p PIANO LITERATURE II**1/2 Course***Prerequisite: MUS 350p or permission of instructor*

A continuation of MUS 350p including the Romantic composers through the present day. Schools of technique and 19th- and 20th-century pianists also will be studied. Two periods per week.

MUS 352 VOCAL LITERATURE **1 Course**

Prerequisite: MUA (voice) 326 or permission of instructor

A course to familiarize the student with the vocal forms, styles, and repertoire of Early English Baroque period; 18th-, 19th- and 20th-century Italian, French, German, British, and American art song literature; and sacred vocal literature. There will be comprehensive weekly listening and reading assignments and some singing. Four periods per week; one day will be a laboratory experience.

MUS 186/286/386/486 SPECIAL TOPICS **1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

MUS 390/490A or B INDEPENDENT STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

MUS 395/495 INTERNSHIP **1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

MUS 397/497A or B TEAM INITIATED STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

MUS 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

MUS 400 SENIOR SEMINAR **1/2 to 1 Course**

Prerequisite: Senior standing and permission of instructor

Senior Seminar is designed to be the capstone experience of the Music Department's core curriculum. As such, the seminar will focus on the research, study, practice, and implementation of the senior Music major's final project, which will consist of a final paper, and a performance or other public presentation. Specific content and format will be determined by the student's concentration. The seminar will function as a laboratory for students to present ideas and receive feedback as they work collaboratively and individually in completing their projects. As a culmination and integration of training and learning and as preparation for their professional future, this seminar provides an important support structure and learning community for Music majors. Course will meet once per week. **NOTE:** Required of all General Music majors, and part of an optional course sequence for Music Education majors. Students in any of the General Music's Performance (Keyboard, Vocal, and Wind) Concentrations will take MUS 400 (1/2 credit) and MUA 400 (1/2 credit) to fulfill the Senior Seminar requirement. Other General Music majors will take MUS 400 as a one-credit course. Music Education majors may choose to take the course as 1/2 or full credit, in consultation with their Academic Adviser.

MUS 100 CLASS PIANO**1/4 Course***Offered: Typically Fall and Spring terms*

Designed for the College student who has had little or no formal keyboard instruction. Emphasis on reading and music fundamentals, and functional use of the piano. Two periods per week. Course Fee: \$10 per term.

MUS 102 CLASS RECORDER**1/4 Course***Prerequisite: Permission of instructor*

An introduction to playing the recorder. Designed for the College student who has little or no formal instrumental instruction. Emphasis will be placed on the fundamentals of music reading as well as the functional use of the recorder. Open to non-Music majors. Two periods per week. Course fee: \$10 per term.

MUS 103 CLASS VOICE**1/4 Course***Prerequisite: Permission of instructor*

First year of vocal study; open to all Berea College students. The class will meet as a whole two hours per week. In addition, students will be divided into smaller groups to rehearse with an accompanist. Some individual practice also is required. All students will have an opportunity to perform at the weekly performance class. Course Fee: \$10 per term.

MUS 130 CHAMBER MUSIC**1/4 Course***Prerequisite: Permission of instructor*

Membership is open to all experienced players interested in performance of chamber music—woodwind, brass, string, percussion, recorder, vocal, and keyboard—by audition or permission of conductor. Regular attendance at rehearsals and performances is obligatory. May be repeated for credit.

MUS 130A CHAMBER SINGERS**1/4 Course***Prerequisite: Permission of instructor*

A select 10- to 20-voice ensemble chosen by audition from the Concert Choir. The Chamber Singers perform at all Concert Choir appearances, sing off-campus in the region, and perform at College chapel services.

MUS 130B JAZZ ENSEMBLE**1/4 Course***Prerequisite: Permission of instructor*

An instrumental ensemble that performs various styles of jazz for big band (swing, blues, bebop, and other types of jazz), including traditional cool, Latin, and jazz-rock fusion. The group performs on campus and throughout the region.

MUS 130C WOMEN'S CHOIR**1/4 Course***Prerequisite: Permission of instructor*

An auditioned ensemble open to all female Berea College students. The choir performs a wide variety of choral music for women's voices, including sacred, secular, Broadway, and folk genres. Performances are at campus and community functions with several short, off-campus trips.

MUS 130D RECORDER ENSEMBLE **1/4 Course**

Prerequisite: Permission of instructor

A chamber group that specializes in music for this historic family of wooden flutes. Repertoire includes music from the medieval period to the present. Students learn to play and perform on several different sizes of recorder.

MUS 130E CHAMBER MUSIC **1/4 Course**

Prerequisite: Permission of instructor

Open, by permission of the Music faculty, to Berea College students seeking to perform in small chamber ensembles, depending on available instrumentation and ability.

MUS 130F BLUEGRASS MUSIC ENSEMBLE **1/4 Course**

Prerequisite: Permission of instructor

An ensemble of up to six members (guitar, banjo, fiddle, mandolin, bass, and lead singer). The ensemble specializes in traditional and contemporary bluegrass and old-time music. The group performs on and off campus.

MUS 130G CHAMBER WINDS **1/4 Course**

Prerequisite: Permission of instructor

An ensemble comprised of advanced musicians of the Wind Ensemble. The ensemble's repertoire ranges from 17th-century works for winds to newly commissioned works. The group performs two to three concerts per term.

MUS 130H AFRICAN/LATINO PERCUSSION ENSEMBLE **1/4 Course**

Prerequisite: Permission of instructor

An ensemble that performs a variety of rhythms based on the traditional drumming styles of the Caribbean, West Africa, and South America.

MUS 130J CONTEMPORARY PERCUSSION ENSEMBLE **1/4 Course**

Prerequisite: Permission of instructor

An ensemble that includes drums, percussion, and a basic modern-rhythm section. The ensemble performs a range of contemporary styles including jazz, Latin, rock, funk, and world beat.

131 CONCERT CHOIR **1/4 Course**

Prerequisite: Permission of instructor

Sixty-voice, mixed-choral ensemble open to all Berea College students; membership is gained by audition. Performs wide variety of musical styles, both sacred and secular, and in several languages. Regular attendance at all rehearsals and performances is required. Four periods per week. May be repeated for credit.

MUS 132 CONCERT BAND **1/4 Course**

Prerequisite: Permission of instructor

Open to all Berea College students; membership is gained by audition and demonstrated ability to read at sight. Regular attendance at all rehearsals and performances is required. Meets twice weekly, performs at several College functions and in concert. Membership in Concert Band is a prerequisite to Stage Band membership. May be repeated for credit.

MUS 135 BLACK MUSIC ENSEMBLE (also AFR 138)**1/4 Course***Prerequisite: Permission of instructor or*

Open to all Berea College students, this ensemble specializes in the performance of African-American sacred music, particularly spirituals and gospel music. The ensemble meets twice weekly for one and one-half hours. Regular attendance is required at all rehearsals and performances including annual Fall and Spring concerts, as well as several other programs each term. Membership by permission of instructor after audition. May be repeated for credit.

NURSING**NUR 300 INTRODUCTION TO THE ART AND SCIENCE OF NURSING****1 Course**

This course introduces the student to the interwoven concepts of the art and science of nursing. Students will analyze the Caring Model as a philosophical foundation for professional nursing practice. Students will explore the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice* with emphasis upon human diversity, the nurse-client relationship, the professional roles of the nurse, effective communication, and group process. This course includes four hours of theory/classroom experience each week. Appropriate standardized exam(s) may be required. **NOTE:** Taken Spring Term of first year. Course Fee: \$50.

NUR 341 ESSENTIALS OF NURSING PRACTICE I**1 Course***Prerequisites: NUR 300 and BIO 302*

This course focuses on the assessment of health and the promotion of wellness throughout the lifespan through the nursing process, and American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*. Caring is the paradigm for this course and expands the concepts of critical thinking, nursing, person, environment, and health. Students also will explore community health concepts with emphasis on the family, health promotion, and concepts of epidemiology. This course includes three hours of theory/classroom experience and three hours of clinical each week. Appropriate standardized exam(s) may be required. **NOTE:** Taken Fall Term of sophomore year. Course Fee: \$50.

NUR 342 ESSENTIALS OF NURSING PRACTICE II**1-1/2 Courses***Prerequisite: NUR 341*

This course continues the focus on the assessment of health and promotion of wellness throughout the lifespan through the nursing process, and the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*. The course provides the opportunity for students to apply carative factors as a foundation for nursing care of common health care concerns of children and adults. Caring is the paradigm for this course and expands the concepts of critical thinking, nursing, person, environment, and health. Integration of health assessment, pathophysiology, and pharmacology will be emphasized. This course includes four hours of theory/classroom experience each week and 84 hours of clinical experience per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Spring Term of sophomore year. Course Fee: \$50.

NUR 343 NURSING OF WOMEN AND THE CHILDBEARING FAMILY **1-1/2 Courses**

Prerequisites: NUR 342, BIO 307 and 322, CFS 221, CHM 113, PSY 100, and SOC requirement The focus of this course is on nursing and women and the childbearing family, including women's health, antepartum, intrapartum, postpartum, and neonatal clients/families. Caring is the paradigm for this course and expands the concepts of critical thinking, nursing, person, environment, and health. Clinical experiences provide the student with opportunities to care for clients/families in congruence with the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*. This course includes four hours of theory/classroom experience each week and 84 hours of clinical experience per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Fall Term of junior year. Course Fee: \$55.

NUR 344 NURSING OF CHILDREN AND ADULTS WITH PSYCHIATRIC/MENTAL HEALTH NEEDS **1 Course**

Prerequisites: NUR 342, BIO 307 and 322, CFS 221, CHM 113, PSY 100, and SOC requirement

The focus of this course is on nursing care of children and adults with psychiatric/mental-health needs. Caring is the paradigm for this course and expands the concepts of critical thinking, nursing, person, environment, and health. Clinical experiences provide the student with opportunities to care for clients in congruence with the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*. This course includes two hours of theory/classroom experience each week and 84 hours of clinical experience per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Fall Term of junior year.

NUR 345 RESEARCH IN NURSING **1/2 Course**

Prerequisite: NUR 342, CFS 221, BIO 322, CHM 113, PSY 100, and SOC requirement

The focus of this course is the role of research in nursing practice. Students will explore sources of knowledge appropriate to the discipline of nursing. Students will focus on the use of research-based knowledge from nursing and the sciences as the basis for practice, as described in the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*. The evolution of knowledge and research practices in nursing will be examined. Critical appraisal and use of nursing research studies will be a major emphasis of the course. A group presentation of a research critique, which focuses on the usefulness of the study to the discipline, is a major requirement of the course. Two hours in class each week. Appropriate standardized exam(s) may be required. **NOTE:** Taken Fall Term of junior year.

NUR 346 NURSING OF CHILDREN AND ADULTS I **2 Courses**

Prerequisites: NUR 343, 344, and BIO 307

This course is the first of a two-course sequence that focuses on the care of children and adults experiencing alterations in health. Caring is the paradigm for this course and expands concepts of critical thinking, nursing, person, environment, and health. Clinical experiences provide the student with the opportunities to care for clients/families in congruence with the American Association of Colleges of Nursing (AACN) *Essentials of Baccalaureate Education for Professional Nursing Practice*. Five hours of class each week and 120 hours of clinical per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Spring Term of junior year. Course Fee: \$55.

NUR 347 NURSING OF CHILDREN AND ADULTS II

1-1/2

Courses

Prerequisite: NUR 346

This course is the second of a two-course sequence, which deepens the student's understanding of the nursing care of children and adults experiencing alterations in health. Caring is the paradigm for this course and expands concepts of critical thinking, nursing, person, environment, and health. Clinical experiences provide the student with the opportunities to care for clients in congruence with the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*. This course includes four hours of theory/classroom experience each week and 84 hours of clinical experience per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Fall Term of senior year. Course Fee: \$100.

NUR 348 COMMUNITY HEALTH NURSING AND LEADERSHIP I

1 Course

Prerequisites: NUR 346

This course is the first of a two-course sequence that focuses on integration and application of public-health and leadership theory within the caring paradigm. Social, cultural, economic, and political influences on families, communities, and the healthcare system will be explored. Emphasis is on assessment and health planning with families and populations at risk for health problems. Caring is the paradigm for this course and expands the concepts of critical thinking, nursing, person, environment, and health. Clinical experiences provide the student with opportunities to care for clients in congruence with the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice* and the Standards of Community Health Nursing Practice. Community-based clinical/practicum settings include a variety of health and social agencies in nearby Appalachian counties, including schools, community services, health departments, and homes. This course includes two hours of theory/classroom experience each week and 84 hours of clinical experience per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Fall Term of senior year.

NUR 349 COMMUNITY HEALTH NURSING AND LEADERSHIP II

1 Course

Prerequisite: NUR 348

This course is the second of a two-course sequence that focuses on integration and application of public health and leadership theory within the caring model. Social, cultural, economic, and political influences on families, communities, and the health care system will be explored. Emphasis is on implementation and evaluation of health care services to families, groups, and communities. Caring is the paradigm for this course and expands the concepts of critical thinking, nursing, person, environment, and health. Clinical experiences provide students with opportunities to care for clients in congruence with the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice* and Standards of Community Health Nursing Practice. Community-based clinical/practicum settings include a variety of health and community agencies, including schools, health departments, hospitals, and neighborhoods. This course includes two hours of theory/classroom experience each week and 84 hours of clinical experience per term. Appropriate standardized exam(s) may be required. **NOTE:** Taken Spring Term of senior year.

NUR 450 SYNTHESIS IN NURSING PRACTICE**2 Courses***Prerequisites: NUR 347 and 348*

This capstone course focuses on the delivery of nursing care to children and adults with multiple, complex health problems. Caring is the paradigm for this course and expands concepts of critical thinking, nursing, person, environment, and health. Students will synthesize content from previous courses. In congruence with the American Association of Colleges of Nursing's (AACN's) *Essentials of Baccalaureate Education for Professional Nursing Practice*, students will have the opportunity to expand the following abilities: a) identify patterns, connections, and relationships in health and disease, b) make decisions about nursing care based on a thorough assessment, analysis, and exploration of potential consequences, c) use therapeutic communication, and d) develop skills needed to design, implement, and evaluate therapeutic nursing interventions. Test-taking skills and relaxation techniques also will be addressed. A clinical component will provide opportunity for the student to master areas of recognized need. Four hours of class each week and 160 hours of clinical per term will be included. Appropriate standardized exam(s) may be required. **NOTE:** Taken Spring Term of senior year. Course Fee: \$100.

NUR 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course***Prerequisites: Determined by instructor**See p. 54 of this Catalog.***NUR 390/490A or B INDEPENDENT STUDY****1 Course***Prerequisite: Sophomore or junior standing for 390; senior standing for 490**See pp. 54-55 of this Catalog.***NUR 395/495 INTERNSHIP****1 to 3 Courses***Prerequisite: Sophomore, junior; or senior status**See p. 55 of this Catalog.***NUR 397/497A or B TEAM INITIATED STUDY****1 Course***Prerequisite: Sophomore or junior standing for 397; senior standing for 497**See pp. 54-55 of this Catalog.***NUR 398/498 DIRECTED STUDY****1 Course***Prerequisite: Will vary, but always will include permission of instructor**See p. 55 of this Catalog.*

PEACE AND SOCIAL JUSTICE

PSJ 100 FOUNDATIONS OF PEACE AND SOCIAL JUSTICE

1 Course

This course provides an introduction to issues of peace and social justice, skills of social analysis, and actions for social change. The course addresses questions of poverty and inequality, the environment, and human rights. It surveys features of the modern world widely considered to be problematic, including the extent of serious poverty; the dynamics of gender and racial discrimination; questions of human rights; and situations of war and other forms of violence. The emphasis, however, is not on the state of the world but on ways of understanding it: on histories and theories of causes, effects, and solutions. The course does not teach to a predetermined notion of “justice,” or to a particular political point-of-view, and it is not inherently “pacifist.” It does; however, *problematize* inequality, conflict, and violence, and it introduces students to resources for analysis of and engagement with the world.

PSJ 110 CONFLICT TRANSFORMATION

1 Course

Designed as a broad introduction to the philosophy and practice of conflict transformation, this course will familiarize students with various theoretical understandings of conflict. Beginning with the premise that conflict is a normal part of daily life, the course will examine conflict as an important dynamic in personal growth and social transformation, as well as a source of alienation, violence, and war. Students will explore conflict at a personal, communal, national, and international level. They will be encouraged to critically examine their underlying assumptions and beliefs about conflict and their patterns of response to conflict. An interdisciplinary approach drawing on both social science and spiritual perspectives will be used to explore conflict/communication styles, the role of power, systemic analysis, the dynamics of change, and intervention in interpersonal, organizational, and inter-group conflicts.

PSJ 205 PEACE AND SOCIAL JUSTICE: THEORIES AND PRACTICE

1 Course

Prerequisites: GSTR 100 or 110 and GSTR 203 or 210

A consideration of social justice and peace from both secular and religious points of view. The course considers leading theories about the nature and implementation of social justice, and the role that religions (especially Christianity, Hinduism, Islam, and Judaism) play in wars and conflicts, as well as in peace and justice movements. The teachings and practices of Mahatma Gandhi and Martin Luther King Jr. are considered as ways of opening up a broad and cross-cultural study of alternatives to violence, in particular through understandings of peacemaking as spiritual practice. The course also examines Gandhi's and King's critics. Student projects focus on current issues, in particular on violence and peace-making in the contemporary world.

PSJ 186/286/386/486 SPECIAL TOPICS

1/2 or 1 Course

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

PSJ 390/490A or B INDEPENDENT STUDY

1 Course

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

PSJ 395/495 INTERNSHIP**1 to 3 Course**

Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.

PSJ 397/497 A or B TEAM INITIATED STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

PSJ 398/498 DIRECTED STUDY**1 Course**

Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

PHILOSOPHY**PHI 100 INTRODUCTION TO PHILOSOPHY****1 Course**

An introduction to philosophy as disciplined inquiry about fundamental features of the world; powers and limits of mind as a way of knowing; and puzzles posed by living and living well. Attention to contemporary and classic texts selected from the history of philosophy.

PHI 104 MORALITY, LAW, AND PHILOSOPHY**1 Course**

An introductory course in philosophy through examination of contemporary moral and legal controversies, such as abortion, censorship, freedom of religion, equality, and civil disobedience, among others. Attention to classic and contemporary philosophic texts, relevant legal materials, and fundamental features of law and of morality.

PHI 106 INTRODUCTORY REASONING**1 Course**

A course about principles and applications of correct canons of reasoning. Focus on identifying, evaluating, and constructing arguments using a variety of techniques. This course may be used to meet the Practical Reasoning (PR) Option.

PHI 108 BEGINNING PHILOSOPHY**1 Course**

A beginning course in philosophy focused on ancient origins of philosophic inquiry-and its distinctive qualities. Attention to earliest philosophic texts of ancient Greece, the emergence of a certain range of questions as philosophic, and some fundamental features of Plato's and Aristotle's thought.

**PHI 204 JUSTICE AND LAW IN CLASSICAL POLITICAL PHILOSOPHY
(also PSC)****1 Course**

Prerequisite: GSTR 203 or GSTR 210

An examination of Greek, Roman, and Christian thinking about law, justice, and political community, including works by Plato, Aristotle, Cicero, and Thomas Aquinas, among others. This course may be used to meet the Western History Perspective.

PHI 207 HUMAN RIGHTS, INTERNATIONAL LAW**1 Course***Prerequisite: GSTR 220 or sophomore standing*

A philosophic examination of moral and philosophic issues involving the nature of law and rights, theories of just and unjust war, views of state sovereignty, and the international community. Thematic focus on legal and moral questions about uses of force in humanitarian interventions to address violations of human rights. Attention to classic and contemporary philosophic texts, relevant legal documents, and some basic structures of state and international order. This course may be used to meet the Practical Reasoning (PR) Option and a World Culture (Western) component of the International Perspective.

PHI 209 FREEDOM, LAW, AND THE MODERN STATE (also PSC)**1 Course***Prerequisite: GSTR 203 or GSTR 210*

An examination of some distinctive ways of thinking about law, freedom, and the state since the Reformation, including the social contract views of Hobbes, Locke, and Rousseau, utilitarianism, Marx, 19th-century historicism, and 20th-century pragmatism.

PHI 212 SCIENCE IN THE CONTEMPORARY WORLD**1 Course***Prerequisite: GSTR 203, GSTR 210, or sophomore standing*

An exploration of various topics in the philosophy of science. Possible topics include the nature of science and the scientific method, the implications of the results of contemporary natural sciences for humanity's place in the universe, and ethical questions that arise out of the scientific method and its results.

PHI 214 APPROACHES TO ETHICS**1 Course***Prerequisite: GSTR 203, GSTR 210, or sophomore standing*

An examination of distinctive religious and philosophic ways of thinking about good, duty, virtue, and the nature of ethics. Attention to selected works of Thomas Aquinas, Aristotle, Kant, John Stuart Mill, and others.

PHI 215 THINKING ABOUT GOD**1 Course***Prerequisite: GSTR 203, GSTR 210, or sophomore standing*

An exploration of topics in the philosophy of religion. Possible topics include arguments for and against the existence of God, the nature and attributes of a divine being, and the nature of faith and religious experience.

PHI 218 SYMBOLIC LOGIC**1 Course***Prerequisite: Completion or waiver of MAT 012*

A study of deductive systems, including sentential and predicate logic. Attention to syntax, semantics, and derivations in formal languages.

PHI 224 FREE WILL AND MORAL RESPONSIBILITY**1 Course***Prerequisite: GSTR 203 or GSTR 210*

An introduction to fundamental issues about the nature of human choice, the conditions of moral responsibility, and relationships between the two, including philosophic investigations of causation and determinism, whether only humans are able to act other than they do, and the scope of moral responsibility. Attention to classic texts and contemporary philosophic research, writing, and rigorous thinking about the metaphysics of free will and responsibility.

PHI 230 REFLECTING ON NATURE**1 Course***Prerequisite: GSTR 203, GSTR 210, or sophomore standing*

A course on philosophically informed thinking about the environment. Course explores ways of thinking about the environment, humanity, and other species, focusing on a few environmental problems illustrating fundamental puzzles about the biological sciences, about our responsibilities for nature and for future generations, and about the basis for valuing things human and non-human, living and inanimate.

PHI 235 TRUTH AND MEANING**1 Course***Prerequisite: GSTR 203 or GSTR 210*

An introduction to the philosophy of language, including philosophic investigation of links between thought and language, whether non-human creatures can be taught language, relationships between language and reality, and the nature of truth. Attention to classic texts and contemporary philosophic research, writing, and rigorous thinking about language as bearer of meaning and truth.

PHI 240 PRACTICAL PHILOSOPHY**1 Course***Prerequisite: GSTR 203, GSTR 210, or sophomore standing*

An exploration of selected topics in applied and professional ethics, which may include issues in medicine, law, and business, as well as privacy, confidentiality, and other aspects of being a professional. May be repeated for credit, provided topics differ.

PHI 250 MINDS, BRAINS, AND MACHINES**1 Course***Prerequisite: GSTR 203 or GSTR 210*

An introduction to the philosophy of mind, examining such questions as whether there could be consciousness after bodily death, whether the mind is anything “over and above” the brain and central nervous system, whether a human-built machine could ever think or be conscious. Attention to classic texts and contemporary philosophic research, writing, and rigorous thinking about the nature of mind and thought.

PHI 305 CLASSICAL PHILOSOPHY**1 Course***Prerequisite: One PHI course*

An examination of philosophy in ancient Greece and the Roman world—texts, ideas, and figures. Emphasis will be placed on the works of Plato and Aristotle. This course may be used to meet the Western History Perspective.

- PHI 310 PHILOSOPHY FROM DESCARTES TO KANT** **1 Course**
Prerequisite: One PHI course
 An examination of European philosophy in the 17th and 18th centuries. Emphasis on the epistemological and metaphysical views of Descartes, Hume, Kant, and Locke.
- PHI 315 KANT AND HIS PHILOSOPHICAL LEGACIES** **1 Course**
Prerequisite: One PHI course
 An examination of selected philosophic topics, themes, or movements in 19th- and 20th-century European and American philosophy, such as German idealism, American pragmatism, philosophy as analysis, phenomenology and existentialism, and post-modernism. May be repeated for credit, provided topics differ.
- PHI 380 PHILOSOPHY SEMINAR I** **1 Course**
Prerequisite: One 300-level PHI course or permission of instructor
 Advanced study in a philosophic area, with an emphasis on careful reading of primary texts. Specific topic and prerequisites announced in the *Schedule of Classes* prior to registration.
- PHI 480 PHILOSOPHY SEMINAR II** **1 Course**
Prerequisite: PHI 380
 Advanced study in a philosophic area, with an emphasis on careful reading of primary texts. Specific topic and prerequisites announced in the *Schedule of Classes* prior to registration.
- PHI 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisites: Determined by instructor
 See p. 54 of this Catalog.
- PHI 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
 See pp. 54-55 of this Catalog.
- PHI 395/495 INTERNSHIP** **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
 See p. 55 of this Catalog.
- PHI 397/497 A or B TEAM INITIATED STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
 See pp. 54-55 of this Catalog.

RELIGION

REL 101 WRESTLING WITH GOD: AN INTRODUCTION TO THE SCRIPTURES **1 Course**

An inquiry into the basic stories and their texts in the Old and New Testaments. The course will investigate “Wrestling with God” as a dominant narrative theme in biblical literature. Assignments emphasize class reading of texts, several short essays, and preparation of a course workbook.

REL 109 INTRODUCTION TO CHRISTIAN THOUGHT **1 Course**

A study of the basic Christian practices, beliefs, teachings, and concepts: God, creation, human nature, sin, evil, Christ, salvation, Holy Spirit, community or church, sacraments, ministry, Christian life and morality, last things, scripture, etc. This course will examine both the variety of Christian perspectives on, and the web of relationships between, these various beliefs and practices. This course may be used to meet the Religion Perspective.

REL 117 AN INTRODUCTION TO WORLD RELIGIONS **1 Course**

An examination of various religions with respect to selected themes, such as apocalypticism, sacred space, rites and worship, sacred texts and literature, culture and codes for living, and understandings of the divine. This course may be used to meet a World Culture (Western) component of the International Perspective.

REL 126 POVERTY AND JUSTICE **1 Course**

A study of poverty and homelessness in Appalachia and the world in light of empirical evidence, sacred texts, and social and theological approaches to economic justice, combining experiential and theoretical learning to help students develop an understanding of economic injustice.

REL 200 MYTH, SYMBOL, AND RITUAL **1 Course**

Prerequisite: GSTR 100, GSTR 110, or permission of instructor

An introduction to the academic study of religions, including interactions of myths, symbols, and rituals within religions, examinations of texts and literature, and considerations of cultural settings for religious belief and practice.

REL 205 INTRODUCTION TO THE OLD TESTAMENT **1 Course**

Prerequisite: GSTR 100 or GSTR 110

A survey of the literature, religion, and social history of ancient Israel, using modern historical-critical methods. Attention to understanding the Old Testament within the context of the history and culture of the ancient Near East.

REL 207 INTRODUCTION TO THE NEW TESTAMENT **1 Course**

Prerequisite: GSTR 100 or GSTR 110

A survey of the literature, religion, and social history of the early Christian movement, using modern historical-critical methods. Attention to understanding how the early Church’s worship, teaching, and proclamation shaped the New Testament.

REL 210 THEOLOGY IN THE ARTS AND MEDIA**1 Course***Prerequisite: GSTR 100 or GSTR 110*

An examination of literary and artistic expressions of theological themes, such as creation, the human condition, and justification. Attention to texts and thought, creative dimensions, and examples of literary, artistic, and musical reinterpretations of themes.

REL 211 WOMEN IN RELIGION (also WST)**1 Course***Prerequisite: GSTR 100 or GSTR 110*

A study of the teachings on and participation of women in religion, as well as a study of the status and roles of women in several religious traditions, such as Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, or indigenous religious traditions.

REL 215 HISTORY OF CHRISTIANITY TO 1600 (also HIS) 1 Course*Prerequisite: HIS 101 or 226; or GSTR 220 or sophomore standing**See HIS 215 for course description.***REL 218 VOICES OF NONVIOLENCE****1 Course***Prerequisite: GSTR 203 or GSTR 210*

An introduction to the experience of nonviolence as expressed in the lives and religious writings of figures such as Mubarak Awad, Dorothy Day, Mahatma Gandhi, Thich Nhat Hanh, Ghaffar Khan, Chan Khong, Martin Luther King Jr., and Jean Vanier. This course may be used to meet the Religion Perspective.

REL 219 ANTHROPOLOGY, ARCHAEOLOGY, AND BIBLICAL STUDIES**1 Course***Prerequisite: GSTR 100 or GSTR 110*

A survey of the contributions of cultural anthropology and Near Eastern archaeology to understanding the Bible.

REL 221 THE PROTESTANT REFORMATION AND ITS LEGACIES**1 Course***Prerequisite: GSTR 220 or sophomore standing*

Introductory study of the Christian theology and ethics of the Protestant Christian Reformations (1517-1650) and their legacies in modernity, post-modernity, and today. Examination of representative doctrinal, moral, social, and political issues; of the lives and teachings of various reformers; and of distinctive Protestant moral and doctrinal teachings as various Christian communities that have sought to reform Christianity in response to the challenges and change in the modern and postmodern worlds.

REL 223 THEOLOGIES OF LIBERATION (also WST)**1 Course***Prerequisite: GSTR 100 or GSTR 110*

An exploration of the rise of political liberation theology movements and their critiques of and novel contributions to traditional expressions of Christian theology. Focus on understandings of theory and praxis, race, gender, class dimensions of social analysis, and re-constructions of the concepts of Christ and God.

REL 225 IMAGES OF JESUS**1 Course***Prerequisite: GSTR 100 or GSTR 110*

An examination of the life and thought of Jesus through study of the Gospels and contemporary historical texts. Exploration of continuing influence of Jesus by study of various forms of art and literature.

REL 227 BIBLICAL THEMES, MODERN LIFE**1 Course***Prerequisite: GSTR 100 or GSTR 110*

A thematically organized approach to studying biblical texts. Attention to ways the Bible may inform theological reflections on selected issues of modern life, such as creation and the environment, social justice, civil discourse, gender, and race, among others.

REL 231 RELIGIONS OF INDIA AND TIBET (also AST)**1 Course***Prerequisite: GSTR 100 or GSTR 110*

A study of the principal religious traditions of South Asia: Buddhism, Hinduism, Islam, Jainism, and Sikhism. The course includes readings in the classical primary texts of each tradition, as well as attention to ritual and practice.

REL 232 RELIGIONS OF CHINA AND JAPAN (also AST)**1 Course***Prerequisite: GSTR 100 or GSTR 110*

A study of the principal religious traditions of East Asia: Buddhism, Confucianism, Shinto, and Taoism. The course includes readings in the classical primary texts of each tradition as well as attention to ritual and practice. This course may be used to meet the Religion Perspective and a World Culture (Non-Western) component of the International Perspective.

REL 235 CHRISTIAN SOCIAL ETHICS**1 Course***Prerequisite: GSTR 203 or GSTR 210*

An introduction to methods and resources for ethical analysis, as well as an examination of the basic elements of Christian ethical reflection and a variety of ethical perspectives for decision-making. Special attention will be given to the correlation of theological and biblical insights with contemporary personal and social issues. This course may be used to meet the Religion Perspective.

REL 240 ISLAM**1 Course***Prerequisite: GSTR 100 or GSTR 110*

This introduction to Islam will focus on the formative traditions of Islam in an effort to understand the sources and patterns of faith within Islam. Primary emphasis will be placed on the text of the Qur'an and the role of Revelation in the development of Islam. A secondary focus will be on the interrelation of Islamic Traditions and Judeo-Christian Traditions.

REL 250 JUDAISM**1 Course***Prerequisite: GSTR 100 or GSTR 110*

Survey of the literature, thought, and culture of Judaism in its various periods. Emphasis placed on the literature of rabbinical Judaism and on those genre of literature which reinterpret Judaism in its cultural and historical contexts.

REL 260 BUDDHISM (also AST) 1 Course

Prerequisite: GSTR 100 or GSTR 110

A study of the history and diversity of Buddhist traditions, from the time of the Buddha in 5th-century BCE India to contemporary Buddhist communities in Asia and the West. Special attention will be given to the problems and prospects of Buddhism in relation to contemporary issues, such as gender and sexuality, ecological change, and the relationship between religion and politics.

REL 306 GOD, CREATION, AND SALVATION 1 Course

Prerequisite: One 200-level REL course

Study of Christian thought about God, creation, and salvation through studies of selected Christian texts from the ancient through postmodern periods. The course examines major historical developments in Christian thinking about one or more of these three themes, with a focus on modern and contemporary constructive and critical theological models of these concepts.

REL 308 THEMES IN ASIAN TRADITIONS (also AST) 1 Course

Prerequisite: One AST course

A close study of selected texts, practices, or experiences of one or more Asian religious traditions. May be repeated for credit, provided topics vary.

REL 309 THEMES IN ABRAHAMIC TRADITIONS 1 Course

Prerequisite: One 200-level REL course

Offered: Typically alternate years (next offered in Spring 2007)

A thematic and comparative study of the theologies, beliefs, and practices of three religions sharing roots in the figure of Abraham—Christianity, Islam, and Judaism. Attention to the roles of revelation and sacred text, monotheistic ideals, structures of authority, worship and ritual, ethical formation, and relation of the faiths to material culture and political order.

REL 310 ADVANCED OLD TESTAMENT STUDIES 1 Course

Prerequisite: REL 205 or REL 207

A close study of selected legal, prophetic, or poetic books from the Old Testament period. Special attention given to the ancient Near Eastern context relevant to these books. Rotating topics. May be repeated for credit, provided topic varies.

REL 311 ADVANCED NEW TESTAMENT STUDIES 1 Course

Prerequisite: REL 205 or REL 207

A close study of selected Gospels, epistles, or apocalyptic material from the New Testament period. Special attention will be given to the influence of Greco-Roman thought and Intertestamental Judaism on early Christian writings. Rotating topics. May be repeated for credit, provided topic varies.

REL 316 CHRISTIANITY AND RELIGIOUS PLURALISM 1 Course

Prerequisite: One 200-level REL course

A study of philosophical, theological, social, and/or historical issues surrounding continuing encounters between diverse religious communities and traditions within the contexts of American pluralism and global multi-culturalism. Attention to tensions and conversations between traditions regarding issues such as conceptions of the sacred, gender and sexuality, violence, and ecology.

REL 480 SEMINAR IN RELIGION**1 Course**

Prerequisite: Senior standing or permission of instructor

This seminar will enable Religion majors to reflect on and integrate their studies within the department and the broad requirements of the core curriculum. The course also will provide opportunities for the student to take part in the interdisciplinary exploration of issues in Religious Studies. Topics considered will be chosen by the seminar in an effort to reflect the interdisciplinary nature of Religious Studies.

REL 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

REL 390/490A or B INDEPENDENT STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

REL 395/495 INTERNSHIP**1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

REL 397/497 A or B TEAM INITIATED STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

REL 398/498 DIRECTED STUDY 1 Course

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

PHYSICAL EDUCATION AND HEALTH**PEH 100 INTRODUCTION TO LIFETIME WELLNESS****1/2 Course**

Knowledge and physical activities to improve and maintain wellness in College and after. The course brings together several major components: assessment of physical fitness, swimming abilities for survival, study of current information about well ness, and physical activities. Strongly recommended to be taken in the first year. Meets four hours each week.

**PEH 120 HEALTH AND MOVEMENT STUDIES
FOR ELEMENTARY EDUCATORS**

1 Course

Prerequisite: PEH 100 and PED 203

Study of fundamental movement concepts and the foundations of good health in preparation for helping students in pre-school through grade 5 to understand and apply these concepts. Students will learn to structure age-appropriate movement experiences that encourage self-expression and social interaction, and develop motor skills, as well as convey important health concepts such as the structure and function of the human body and ways to achieve fitness and a healthy lifestyle. They will learn folk dances from a variety of countries and historical time periods, and will develop creative-movement experiences for the purpose of teaching dance vocabulary and processes, and for the purpose of teaching other content through dance. Practical teaching experience with children is included in the course. PEH 120 is limited to those students seeking a degree in Education Studies with Elementary Certification, P-5, or Interdisciplinary Early Childhood Education (IECE) with Teacher Certification (the latter a concentration in the Child and Family Studies Department).

**PEH 330 EXTENDED SCHOOL EXPERIENCE FOR
PHYSICAL EDUCATION MAJORS AND HEALTH MINORS**

1 Course

Prerequisites: Admission to the Teacher Education Program and satisfactory completion of a major or minor course that has a methods component (chosen from PED 244, 245, 246, 247, 250, 251, 362, or HLT 315)

This course is designed as an advanced-level practicum to allow students an opportunity to integrate teaching skills and understandings in a school setting. This experience enables students to compile evidence that they meet the performance indicators required for admission to Student Teaching. In the course of the practicum, students will be expected to demonstrate the ability to teach in a manner that invites integration with their students, including the ability to formulate and use appropriate and effective questioning strategies. Students also will keep a journal of daily reflections that reveals the depth of their ability to learn from their own teaching. Students will be expected to plan and implement at least one unit (related sequence of lessons) of instruction, including: 1) a completed unit plan with goals and objectives; 2) a supporting rationale; 3) a detailed activity outline; 4) a statement describing modes of assessment and samples of student work; 5) an annotated bibliography of materials and texts for students; and 6) an annotated bibliography of readings done in preparation for teaching the unit. It is expected that students will draw from the materials created in this course for entries in their Education portfolios; therefore, a reflective self-assessment should be included with the unit and a statement of evaluation should be obtained from the cooperating teacher.

PED 131 SCOPE OF HUMAN VOLUNTARY MOVEMENT

1 Course

An introduction to the basic understandings and key concepts of the importance of human movement. Emphasis on the history and philosophies of physical education and the sociology of sport and physical activity. Brief survey of biological and psychological backgrounds of physical education.

**PED 244 PHYSICAL EDUCATION ACTIVITIES FOR
THE ELEMENTARY CHILD**

1 Course

A study of the theory and principles of movement for the elementary-school child with emphasis on the analysis of basic movement, motor development, low-organizational games, lead-up games for sports, and creative movement. Selection and progression of movement skills and knowledge in relation to teaching physical activity will be introduced.

PED 245 DANCE**1 Course***Prerequisite: PEH 100 or permission of instructor*

A comprehensive dance course dealing with basic-movement skills and creative-teaching approaches in social, folk, square, and modern dance. Study of dance as an art form and the place of dance in education will be included. One-quarter of class will be directly focused on dance for children, especially creative dance and elementary folk and square dance.

PED 246 INDIVIDUAL AND TEAM SPORTS I**1 Course***Prerequisite: PEH 100 or permission of instructor*

Explores tactics, skills, teaching, and coaching methods for badminton, basketball, bowling, soccer, tennis, and track and field. The philosophy of competition and coaching and practical officiating. Individualized teaching procedures will be used. This course will include a two-hour laboratory experience.

PED 247 INDIVIDUAL AND TEAM SPORTS II**1 Course***Prerequisite: PEH 100 or permission of instructor*

Explores tactics, skills, teaching, and coaching methods in archery, football, golf, softball, volleyball, and introduction to racquetball. The philosophy of competition and coaching and practical officiating. Individualized teaching procedures will be used. This course will include a two-hour laboratory experience.

PED 248 WORLD DANCE**1 Course***Prerequisite: GSTR 100 or GSTR 110*

Explores dance of African and Asian nations in cultural context. The goal of the class is to increase understanding and appreciation of the diversity of ways in which individuals, communities, and groups define themselves in movement, and to develop awareness of dance as a form of cultural expression. At the conclusion of the course, students will examine ways in which African and Asian dance styles have influenced American dance and culture. The class will include dancing, video viewing, interviews with international students, reading, and writing of research and analysis papers. This course may be used as credit toward the minor in Asian Studies. This course also may be used to meet the Arts Perspective and a World Culture (Non-Western) component of the International Perspective.

PED 249 DANCING THROUGH SPACE AND TIME**1 Course***Prerequisite: GSTR 100 or GSTR 110*

This course will introduce students to the historical, theoretical, and critical elements of dance. Students will explore the role that dance has played in society throughout history and in contemporary life. Experiences in class will include reading, discussion, video viewing, movement exploration, creative-process activities, and group presentations. This course may be used to meet the Arts Perspective. **NOTE:** Noncredit for students who took this course as GSTR 109.

PED 250 AQUATICS**1 Course***Prerequisites: Ability to swim several lengths of the pool using more than one stroke, tread water, and retrieve 10 pounds from bottom of the deep end of the pool*

Provides the student with knowledge, skills, and possible American Red Cross certification in community water safety, lifeguard training, and water-safety instructor to teach swimming to all ages.

PED 251 GYMNASTICS**1 Course***Prerequisite: PEH 100 or permission of instructor*

This course deals with the knowledge and skills required to teach gymnastics to school-aged children. Material covered will include gymnastics from a skill-theme and movement-concept approach, as well as a more formal/traditional approach. Experiences will include peer teaching, workshop teaching, planning instruction, skill performance, and assessment.

PED 280 ADAPTED PHYSICAL EDUCATION**1 Course***Prerequisite: PEH 100 or permission of instructor*

Will focus on developing knowledge of current concepts and practices in adapted physical education. Course topics will cover assessment, planning, and implementation of physical-education activities for people with unique needs and abilities.

PED 305 IMPROVISATION AND CHOREOGRAPHY**1 Course***Prerequisite: Berea College Dance experience or permission of instructor*

Students will use movement improvisation to explore themes and ideas, will use movement discovered through improvisation to create choreography, and will engage in thoughtful reflection on the work they are doing. This course may be used to meet the Arts Perspective.

PED 309 CARE AND PREVENTION OF ATHLETIC INJURIES**1 Course***Prerequisite: BIO 101 or permission of instructor*

A brief overview of the mechanism, prevention, management, and rehabilitation of athletic injuries. Practical experience include the performance of simple taping procedures to the major joints of the body, along with the recognition of selected health problems related to athletics. In addition, time will be set aside for students to qualify for American Red Cross CPR Certification.

PED 343 EXERCISE PHYSIOLOGY**1 Course***Prerequisites: Completion or waiver of MAT 012; B10 101; and GSTR 100 or GSTR 110*

Human anatomical systems and their physiological functions with special emphasis on the muscular, nervous, skeletal, circulatory, and respiratory systems as they apply to physical activity. Immediate and long-term effects of physical exercise on the human body. Analysis of techniques related to physical-fitness evaluation, conditioning, and training principles; and current research in exercise physiology.

PED 344 EXERCISE ASSESSMENT AND PRESCRIPTION**1 Course***Prerequisites: Completion or waiver of MAT 012; B10 101; and PED 343*

This course will provide students with the knowledge to understand the link between exercise, health, and disease. The information presented in the course will cover appropriate tools for assessing fitness and developing prescriptive exercise programs. The course content will include: 1) study of assessment techniques for all components of fitness; 2) application of assessment tools for various populations; 3) interpretation of assessment results; and 4) development of exercise programs based upon the assessment outcomes.

PED 353 KINESIOLOGY AND BIOMECHANICS**1 Course***Prerequisites: Completion or waiver of MAT 012; BIO 101; and GSTR 100*

The study of joint and muscle function and the mechanical principles governing human motion. Anatomical and mechanical analysis of physical-education activities and basic skills. Fundamentals of body mechanics, statics, and dynamics; and analysis of human motion.

PED 355 LEADERSHIP AND PROGRAM DEVELOPMENT**1/2 Course***Prerequisites: Junior standing and successful completion of three PED major courses*

An introduction to principles and techniques of leadership and management in wellness, recreational, and physical-education settings. Students will learn fundamental concepts for program planning, development, implementation, and assessment; board development; community relations, program marketing, and development of a participant base; fiscal management; facilities; equipment; and resource planning, acquisition, and evaluation. This course includes leadership- and program-development techniques learned through the Danish American Exchange. The class takes a practical, hands-on approach.

PED 360 ADVANCED ATHLETIC TRAINING**1 Course***Prerequisites: BIO 101 and PED 309*

Will provide those students interested in athletic training, physical therapy, or other sports-medicine fields with advanced knowledge and skills relating to sports medicine. Content will include administrative tasks, legal aspects, pharmacology, therapeutic modalities, evaluation skills, and rehabilitation protocols, as well as other related topics.

PED 362 TEACHING AND EVALUATION IN PHYSICAL EDUCATION**1 Course***Prerequisites: Completion or waiver of MAT 012; completion of two PED major courses*

Theory of curriculum design and theory and application of various teaching strategies and methods for Physical Education, with P-12 Certification majors. Introduction to basic statistical procedures. A review of evaluative techniques for individual and program accomplishments.

**PED 364 MOTOR LEARNING AND PSYCHOLOGY OF SPORT
AND PHYSICAL ACTIVITY****1 Course***Prerequisites: Completion or waiver of MAT 012; PED 343; and BIO 101*

The study of the principles of motor learning and the variables affecting the learning process, motor-development theory, the integration of neuro-physiological and behavioral information, and the psychological theories and techniques for the enhancement of sport and physical-activity performance.

PED 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course***Prerequisites: Determined by instructor**See p. 54 of this Catalog.***PED 390/490A or B INDEPENDENT STUDY****1 Course***Prerequisite: Sophomore or junior standing for 390; senior standing for 490**See pp. 54-55 of this Catalog.*

PED 492 PHYSICAL EDUCATION SEMINAR**1/2 Course**

Prerequisites: BIO 101; either PED 343,353, or 364; and one additional PED major course; junior or senior standing

Emphasizes exploration of professional opportunities and scientific investigation in the field of physical education. Students explore areas of personal career interest, prepare a review of recent literature or a paper based on their primary research, and make a formal oral presentation. Discussion and evaluation of oral reports and presentations by resource persons are included. Required of all Physical Education majors.

PED 395/495 INTERNSHIP**1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

PED 397/497A or B TEAM INITIATED STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

PED 398/498 DIRECTED STUDY**1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

PED 200 SURVIVAL SWIMMING**1/4 Course**

Prerequisite: PEH 100 or permission of instructor

Designed for individuals who have had no previous experience in swimming or those whose skills are so poorly developed that they would be at risk in most aquatic situations. The course emphasizes elementary strokes, survival flotation, treading, firming, sculling, water entry, and on-land rescues. Class meets three hours each week.

PED 203 INDIVIDUAUZED PHYSICAL EDUCATION**1/4 Course**

Prerequisites: PEH 100 and approval of the Department Chairperson and College Health Service

Intended for those students who are unable, for medical reasons, to take any of the general PED activity courses. An individual program will be developed by the Physical Education, Health, and Athletics Department.

**PED 206 CONCENTRATION INTERCOLLEGIATE
TEAM COMPETITION**

1/4 Course Each

Prerequisite: Permission of instructor

Limit of one 206 credit for a particular sport. Minimum requirement of 75-percent participation and special knowledge evaluation. Coaches will use their discretion relative to persons who are injured and credit for the course. Students must register for the course in all terms for which a particular sport is scheduled. For example, intercollegiate basketball is scheduled during both Fall and Spring Terms. Students must be registered for PED 206H during both terms to receive the 1/4 credit. Students must register by specific section as follows:

- 206 A. Soccer - Men
- 206 B. Soccer - Women
- 206 C. Tennis - Women

- 206 D. Cross Country - Men and Women
- 206 E. Swimming - Men and Women
- 206 F. Volleyball - Women
- 206 G Basketball - Women
- 206 H. Basketball - Men (see above note)
- 206 I. Track and Field - Men
- 206 J. Track and Field - Women
- 206 K. Tennis - Men
- 206 L. Baseball
- 206 M. Golf
- 206 N. Softball- Women

PED 206Y MODERN DANCE TROUPE

1/4 Course

Prerequisites: One full year of membership in the Modern Dance Troupe and permission of instructor

To receive credit, students must participate for one regular term, perform in the Modern Dance Concert, and participate in organizing and carrying it out.

PED 206Z COUNTRY DANCERS

1/4 Course

Prerequisites: One full year of previous membership in Country Dancers and permission of instructor

Participation is required for one regular term to receive credit. Membership selected by tryouts. Limit of one regular term PED 206Z for each student toward meeting the requirement for two 1/4-credit PED-activity courses.

PED 209 ADVANCED BEGINNERS AND INTERMEDIATE SWIMMING

1/4 Course

Prerequisite: PEH 100 or permission of instructor

PED211 SELF DEFENSE AND MARTIAL ARTS

1/4 Course

Prerequisite: PEH 100 or permission of instructor

PED 213 GOLF

1/4 Course

Prerequisite: PEH 100 or permission of instructor

NOTE: Not open to students who have received credit for PED 206M. Course Fee: \$5.

PED 214 BADMINTON AND TENNIS **1/4 Course**

Prerequisite: PEH 100 or permission of instructor

NOTE: Not open to students who have received credit for PED 206C or 206K.

PED 215 AEROBIC DANCE **1/4 Course**

Prerequisite: PEH 100 or permission of instructor

PED 216 BODY RECALL **1/4 Course**

Prerequisite: PEH 100 or permission of instructor

PED 217 WALKING FOR FITNESS **1/4 Course**

Prerequisite: PEH 100 or permission of instructor

PED 218 WEIGHT TRAINING **1/4 Course**

Prerequisite: PEH 100 or permission of instructor

PED 219 ADVANCED SWIMMING AND AQUATIC ARTS **1/4 Course**

Prerequisite: PED 209 or permission of instructor

PED 220 STRESS MANAGEMENT **1/4 Course**

Prerequisite: PEH 100 or equivalent; or permission of instructor

Introductory course designed to expose students to a holistic approach to stress management, with regard to coping skills and a host of relaxation techniques with the intention to prevent and/or alleviate the physical symptoms of stress. The purpose is to teach each student the basic principles, theories, and relaxation techniques to effectively manage personal stress, and to assist students in understanding and managing stress as it relates to personal health and lifestyle in the areas of stress sources, responses, reduction, burnout, and prevention. Students taking this course will assess their own stress levels, and design personal dynamic stress interventions optimizing health. The course meets three hours each week.

PED 221 WEIGHT MANAGEMENT **1/4 Course**

Prerequisite: PEH 100 or equivalent; or permission of instructor

Introduction to weight management with an emphasis on the importance of physical activity and healthful nutritional habits throughout one's lifetime. Topics will include the following: obesity, low body weight, eating disorders, physiology of weight gain/loss, exercise as the key to weight management, healthy weight gain, weight-loss myths/quackery, influence of the media on body image, losing/gaining weight in a healthy or sensible way, and nutritional aspects of weight management.

PED 222 WATER FITNESS **1/4 Course**

Prerequisite: PEH 100 or equivalent; or permission of instructor

Students will explore varied water activities/exercises and then choose the ones desirable for them that can lead to the intrinsic improvement of fitness components, as well as promote the extrinsic benefits of water exercise. The exercises generally are done in a vertical position and always with the face and head out of the water in shallow water and/or with flotation in deep water. There will be information on fitness swimming, but students do not have to be able to swim to take the class.

PED 223A OUTDOOR ADVENTURE ACTIVITIES I**1/4 Course***Prerequisite: PEH 100 or equivalent; or permission of instructor*

Introductory course designed to expose students to a variety of lifetime activities very different from traditional activities. Basic skills; equipment needs and selection; safety and etiquette; maintenance and repairs; and environmental awareness and minimal impact concerns will be presented. The types of activities offered will vary. PED 223A activities will include (but are not limited to) archery, cycling, canoeing, and cold-weather backpacking/hiking. Some of these activities will require participation in some day, overnight, and/or early-morning outings.

PED 223B OUTDOOR ADVENTURE ACTIVITIES II**1/4 Course***Prerequisite: P EH 100 or equivalent; or permission of instructor*

Introductory course designed to expose students to a variety of lifetime activities very different from traditional activities. Basic skills; equipment needs and selection; safety and etiquette; maintenance and repairs; and environmental awareness and minimal impact concerns will be presented. The types of activities offered will vary. PED 223B activities will include (but are not limited to) cooperative activities/games, fly fishing, disc golf, orienteering, and circus arts (juggling, stilt walking, unicycling, and yo-yoing). Some of these activities will require participation in some day, overnight, and/or early-morning outings.

PED 224 MODERN DANCE**1/4 Course***Prerequisite: PEH 100 or permission of instructor*

An introduction to contemporary concert dance technique and performance. Students will actively participate in dance classes three hours each week, developing facility of movement, and learning modern-dance technique and improvisation, as well as basic principles of choreography. The goal of the class is to develop dance skills and to prepare the student for future participation in modern dance as a lifelong activity.

PED 226 RACQUETBALL**1/4 Course***Prerequisite: PEH 100 or permission of instructor***PED 227 MOVEMENT FOR THE STAGE****1/4 Course***Prerequisite: PEH 100*

Studies and exercises to aid the acting student or vocal performer in understanding the physical aspects of character: physical and emotional energy flow, body placement, alignment, and body image.

PED 228 SOCIAL AND FOLK DANCE**1/4 Course***Prerequisite: PEH 100 or equivalent; or permission of instructor*

An introduction to popular forms and styles of social dance and folk dance, and folk dance forms from around the world. Students will actively participate in Dance classes three hours each week, learning skills and styles of couple dances, such as waltz, swing, and polka, and of group dances, such as contra and square dance. The goal of the class is to prepare students for a lifetime of participation in social and folk dance.

PED 229 BEGINNING JAZZ DANCE**1/4 Course***Prerequisite: PEH 100*

This course is designed to introduce the beginning Dance student to jazz dance. The content of the course will include a brief look at the roots of jazz dance, jazz dance in relationship to jazz music, and the various jazz dance styles including popular, old-style, blues, and modern.

PED 230 BEGINNING BALLET**1/4 Course***Prerequisite: PEH 100*

This course is designed to introduce the beginning Dance student to ballet technique. The content of the class will include a brief history of ballet, basic information about ballet as an art form, using ballet as a means to improve body awareness and alignment, and using ballet technique.

PED 231 SELF DEFENSE AND MARTIAL ARTS II**1/4 Course***Prerequisite: PEH 100 or PED 211 or equivalent; or permission of instructor*

This course offers intermediate-level instruction in traditional Kung-Fu forms consisting of offensive and defensive maneuvers in a series of block, kicks, strikes, and formal stances. The forms have practical self-defense applications, and will enhance mental and physical focus, balance, cardiovascular health, strength, agility, and coordination. Instruction also includes hand-to-hand defense techniques, ground defense, and information on concentration, relaxation, and assault prevention.

PED 232 MODERN DANCE II**1/4 Course***Prerequisite: PEH 100*

Designed for the student who has had some previous experience in Modern Dance (or have taken PED 224), this course will continue to explore the body as an instrument of expression and how to broaden one's movement range in doing so. The course will consist of experiences in body awareness, technique, improvisation/exploration, and performance.

PED 234 GYMNASTICS**1/4 Course***Prerequisite: PEH 100 or permission of instructor***PED 236 VOLLEYBALL AND RECREATION GAMES****1/4 Course***Prerequisite: PEH 100 or permission of instructor***NOTE:** Not open to students who have had PED 206F.**PED 237 HIKING AND CAMPCRAFT****1/4 course***Prerequisite: PEH 100 or permission of instructor***PED 238 FENCING****1/4 Course***Prerequisite: PEH 100 or permission of instructor***PED310 ADVANCED SWIMMING-LIFEGUARD TRAINING****1/4 Course***Prerequisite: PED 209 or proficiency above intermediate course or permission of instructor*

HEALTH

HLT 111 HUMAN SEXUALITY

1 Course

This course examines the biological, psychological, social, and ethical factors that affect human sexuality and interpersonal relationships. Through lecture, small- and large-group discussions, debates, audiovisuals, a few guest speakers, and directed reading assignments, the focus will be on reality-oriented sexual behavior and attitudes, needs, and interests of College students; positive satisfaction, obligations, and responsibilities to self and others; sexual deviance; influence of society; and changing mores, roles, and lifestyles. Special emphasis will be on examining one's own values. The intent is to educate, not to indoctrinate.

HLT 115 SIGNIFICANT ISSUES IN PERSONAL HEALTH

1 Course

A study of several fundamental issues related to personal health. Topics are based on student need and interests and current developments in the field. Special emphasis on positive emotional, physical, and social health; preventive medicine; and improvement of knowledge, attitudes, and behavior. Basic units in emotional health, drug education, consumer health, human sexuality, and communicable and non-communicable disease.

HLT 209 COMPREHENSIVE FIRST AID

1 Course

Prerequisite: PEH 100 or permission of instructor

A comprehensive course in the latest techniques and procedures in meeting accident and illness emergencies, such as stoppage of breathing, cardiac arrest, airway obstruction, severe bleeding, poisoning, fractures, burns, shock, heat or cold related emergencies, seizures, and sudden illness. Two American Red Cross certificates-Community CPR and Community First Aid and Safety-can be earned. Course Fee: \$5.

HLT 210 HEALTH IN APPALACHIA

1 Course

Prerequisites: PEH 100 or permission; and GSTR 100 or GSTR 110

A study of health and health services of the Appalachian region, and their implications for the future. Designed for the nonprofessional who is interested in the health needs of Appalachians. Included: Cardio-Vascular-renal disease, cancer, influenza and pneumonia, parasitic diseases, accidents, diseases of the early childhood, malnutrition, mental illness, alcoholism, types of medical care and hospitalization, insurance, and various factors affecting attitudes toward healthcare. Directed readings, lectures, discussions, films, guest speakers, a comparison of health in Appalachia with other cultures, a research paper, and field trips. Meets four hours each week. This course is an elective in the Appalachian Studies minor. Because of its service-learning component, this course will meet the Active Learning Experience (ALE) requirement. It also may be used to meet the African Americans', Appalachians', and Women's Perspective.

- HLT 224 ADDICTION AND VIOLENCE IN THE FAMILY** **1 Course**
Prerequisites: PEH 100 or permission; and GSTR 100 or GSTR 110
 A study of addictive behaviors, with emphasis on drugs and alcohol, and the impact upon children and the family system. The course will explore the relationship between different types of addiction and violence, with an emphasis on addictive behavior, and violence prevention, intervention, and postvention. Life skills such as; maintenance of personal boundaries, anger management, conflict resolution, assertiveness, and peer refusal will be included. This course is designed to be educational, not therapeutic.
- HLT 315 HEALTH EDUCATION** **1 Course**
Prerequisites: PEH 100; GSTR 100 or GSTR 110; and one other HLT course
 Stressing psychological, social, and physical implications, the major emphases of this course are: creative teaching; introduction to philosophy/history of health education; and of community health and applications of certain priority topics (mental health, family life and sex education, substance-abuse education, healthcare and disease control, and others) at both the elementary and secondary levels (P-12). Stresses the need for developing positive health behavior and health-education programs that are health-related rather than disease-oriented.
- HLT 318 EMOTIONAL AND MENTAL HEALTH** **1 Course**
Prerequisites: PEH 100; GSTR 100 or GSTR 110; and HLT 115
 A study of the mind and body connection to holistic health. Strategies an individual can use to attain positive emotional and mental health through awareness of cognition, early experiences, and self-concept/self-esteem, and belief systems. The course also will review the impact of emotional and psychological abuse, self-esteem, loss and transitions, and suicide prevention, intervention, and postvention. This course is designed to be educational, not therapeutic.
- HLT 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisites: Determined by instructor
See p. 54 of this Catalog.
- HLT 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.
- HTL 395/495 INTERNSHIP** **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.
- HLT 397/497 A or B TEAM INITIATED STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.
- HLT 398/498 DIRECTED STUDY** **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

PHYSICS

PHY 111 INTRODUCTION TO ASTRONOMY

1 Course

Prerequisite: Completion or waiver of MAT OJ 2

While designed for the student with little or no background in science, this course will be directed toward understanding of the physical principles at work in the universe. Gravitation and the application of Newton's laws, optics and light phenomena, the motions of heavenly bodies, and relativity and cosmology are among the topics to be covered. Through the use of night laboratory sessions, the student should learn to use astronomical instruments (including the 16-inch Cassegrain telescope atop the Science Building) and should become familiar with astronomical phenomena. Three one-hour lecture periods and one two-hour laboratory each week. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. Course Fee: \$20.

PHY 217 GENERAL PHYSICS I WITH ALGEBRA

1 Course

Prerequisite: Complete or waive MAT 110 (no longer offered at Berea) or MAT 115 (or concurrent enrollment)

First half of a two-course sequence stressing the basic concepts of physics and problem solving, suitable for the student intending to major in the physical sciences, as well as for students in the life sciences and arts who seek a liberal-arts course in classical and modern physics. Topics include Newtonian Mechanics, wave motion, heat and energy, fluids, and kinetic theory. Three one-hour periods each week and one two-hour period for discussion or laboratory work.

PHY 218 GENERAL PHYSICS II WITH ALGEBRA

1 Course

Prerequisite: PHY 217; complete or waive MAT 125 (or concurrent enrollment); or permission of instructor

Second half of the introductory physics sequence. Topics include electricity & magnetism, electric circuits, light and optics, radioactivity, and the structure of atoms. Three one-hour periods each week plus one two-hour period for discussion or laboratory work, where appropriate.

PHY 315 INTRODUCTORY PHYSICS I WITH CALCULUS

1 Course

Prerequisite: MAT 220 or concurrent enrollment

This is the first half of a two-course sequence that integrate calculus with physics; required of Physics majors. Three one-hour lectures and one two-hour laboratory session each week.

PHY 316 INTRODUCTORY PHYSICS II WITH CALCULUS

1 Course

Prerequisites: PHY 315 and MAT 225, or concurrent enrollment

This course will continue the integration of physics and calculus that began in PHY 315. Wave phenomena, electricity, magnetism, and optics will be the topics covered. There will be three one-hour lectures and one two-hour laboratory session each week.

PHY 320 MODERN PHYSICS

1 Course

Prerequisites: PHY 218 and MAT 220; or permission of instructor

This course introduces certain 20th-century topics in physics that were not treated in the introductory and intermediate classes. Relativity, introductory quantum mechanics, nuclear physics, and solid-state physics are the subject matter. Four one-hour lectures will be given each week.

PHY 325 MATHEMATICAL METHODS IN PHYSICS I**1 Course**

Prerequisites: PHY 315 and MAT 220 (or concurrent enrollment); or permission of instructor

This course stresses applications of Mathematical methods and techniques to Physics that are needed in the physical sciences. Topics generally include: simple functions of applied math, quadratic and higher-power equations, simultaneous equations, matrices, determinants, eigenvalues and eigenvectors, geometry, vectors, complex numbers, series and approximations, differential operators, and simple integration. Four hours of lectures each week.

PHY 330 MATHEMATICAL METHODS IN PHYSICS II**1 Course**

Prerequisite: PHY 325 and MAT 330; or permission of instructor

A course of applied mathematics and techniques often required in physics. Topics may vary, but will generally include partial differential equations and boundary value problems, Fourier analysis and integral transforms, complex integration, group representations, matrices, and determinants. Four hours of lectures each week.

PHY 335 PHYSICAL OPTICS**1 Course**

Prerequisites: PHY 316 or permission of instructor; and MAT 225

The wave nature of light is presented and optical phenomena explained in terms of the model. Modern topics in optics revolving around the laser are included. Three one-hour lectures and one two-hour laboratory session each week.

PHY 341 ADVANCED GENERAL LABORATORY**1/4 Course**

Prerequisite: PHY 218

A laboratory course dealing with some of the important experimental techniques in modern physics involving experience with such things as vacuum systems; electronic design and shop construction; classical experiments in contemporary physics; and independent research projects. One three-hour laboratory session each week. May be repeated for credit for sequential or differing learning experiences.

PHY 365 THERMAL PHYSICS**1 Course**

Prerequisites: PHY 315 and MAT 330; or permission of instructor

An intermediate course covering classical thermodynamics and the methods of statistical mechanics. Topics covered include the first and second laws of thermodynamics, with applications, statistical theory of entropy, and classical and quantum ensembles. Four one-hour lectures each week.

PHY 460 ELECTROMAGNETIC THEORY**1 Course**

Prerequisites: PHY 316 and MAT 330; or permission of instructor

An introduction to the fundamentals of classical electricity and magnetism and electromagnetic waves. Emphasizing vector analysis and the laws of Coulomb, Faraday, and Ampere, leading to the development of Maxwell's Theory. Four one-hour lectures each week.

PHY 481 CLASSICAL MECHANICS**1 Course***Prerequisites: PHY 315 and MAT 330*

A course covering topics in Newtonian and Lagrangian Mechanics. Topics include rectilinear motion, oscillations, three-dimensional motion, central forces, generalized coordinates and momenta, and Lagrange multipliers.

PHY 482 QUANTUM PHYSICS**1 Course***Prerequisites: PHY 320 and 481; or permission of instructor*

An intermediate course in quantum mechanics, with applications. Topics include Schrodinger's equation, particle in a box, the harmonic oscillator, the hydrogen atom, perturbation theory, and the WKB approximation. Four one-hour lectures each week.

PHY 485 INTRODUCTION TO SOLID-STATE PHYSICS**1 Course***Prerequisites: PHY 315, 316, and 320; or permission of instructor*

This course provides an introduction to the area of solid-state physics. Topics to be covered include crystal structure; diffraction of waves by crystals; thermal properties of solids; dielectric properties of solids; free electron model of metals; band theory; magnetism and magnetic resonance; and superconductivity. Four one-hour lectures each week.

PHY 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course***Prerequisites: Determined by course instructor*

See p. 54 of this Catalog. NOTE: Studies in a specialized area of instructor's and student's interest, such as solid-state physics, thermodynamics, quantum mechanics, optics, radiation physics, etc. Laboratory and discussion sessions will be stressed, with students largely responsible for the progress of the course.

PHY 390/490A or B INDEPENDENT STUDY**1 Course***Prerequisite: Sophomore or junior standing for 390; senior standing for 490**See pp. 54-55 of this Catalog.***PHY 492 PHYSICS SEMINAR****1/4 Course***Prerequisite: Senior standing or permission of instructor*

A course centered around readings, experiments, and research on topics approved by departmental faculty. The seminar emphasizes oral presentations, discussion, and preparation of written reports. Normally taken in the senior year, it is open to other advanced students with permission.

PHY 395/495 INTERNSHIP**1 to 3 Courses***Prerequisite: Sophomore, junior, or senior status**See p. 55 of this Catalog.***PHY 397/497 A or B TEAM INITIATED STUDY****1 Course***Prerequisite: Sophomore or junior standing for 397; senior standing for 497**See pp. 54-55 of this Catalog.*

PHY 398/498 DIRECTED STUDY **1 Course**

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

POLITICAL SCIENCE

PSC 100 INTRODUCTION TO THE STUDY OF POLITICS **1 Course**

Prerequisite: Completion or waiver of MAT 010

A broad survey of the major questions and principles involved in the study of politics. This course may be used to meet the Social Science Perspective.

PSC 110 AMERICAN GOVERNMENT **1 Course**

Prerequisite: Completion or waiver of MAT 010

An analysis of the basic structures, processes, and contemporary problems of American federal government. This course may be used to meet the Social Science Perspective.

PSC 201 AMERICAN POLITICAL THOUGHT (also HIS) **1 Course**

A study of American political thinkers from the Puritans to the present.

PSC 202 WOMEN AND AFRICAN AMERICANS IN POLITICS **1 Course**
(also AFR and WST)

Prerequisite: GSTR 203 or GSTR 210

A study of the participation of women and African Americans in the American political process. Theories of representative democracy and an introduction to the historical struggles for equal rights provide a context for the investigation of contemporary electoral politics, governance, grassroots politics, and public policy. Students examine the progress of women and African American candidates, and of related public policy issues, throughout the current election and its immediate aftermath. This course may be used to meet the African Americans', Appalachians', and Women's Perspective. **NOTE:** In order to receive African and African American Studies or Women's Studies major or minor credit, the student's major project must focus on African Americans or women, respectively.

PSC 204 CLASSICAL POLITICAL PHILOSOPHY (also PHI) **1 Course**

Prerequisite: GSTR 203 or GSTR 210

See PHI 204 for course description. This course may be used to meet the Western History Perspective.

PSC 209 FREEDOM, LAW AND THE MODERN STATE (also PHI) **1 Course**

Prerequisite: GSTR 203 or GSTR 210

See PHI 209 for course description.

PSC 314 AMERICAN CONSTITUTIONAL LAW **1 Course**

Prerequisite: PSC 110 or permission of instructor

An examination of the principles of American constitutional law. The course focuses on major opinions of the U.S. Supreme Court and of lower courts. Some descriptive and supplemental analysis of judicial and constitutional policy-making.

PSC 315 LEGISLATIVE PROCESS**1 Course***Prerequisite: PSC 110 or permission of instructor*

An analysis of the role of Congress in the American political system. Specific attention is given to the theories of representation, the character of legislative institutions, the participants and processes of lawmaking, and legislative decision-making.

PSC 316 THE AMERICAN PRESIDENCY**1 Course***Prerequisite: PSC 110 or permission of instructor*

An examination of the President's place in national politics. Major topics include the development and exercise of formal and informal powers, problems in presidential selection, forms of political and administrative leadership, and the relationship between the presidency and the mass public, media, Congress, and courts.

PSC 317 THE JUDICIAL PROCESS**1 Course***Prerequisite: PSC 110 or permission of instructor*

The organization, functioning, and political role of the courts and the legal process in the United States. Detailed attention is given to theories of adjudication, staffing, judicial decision-making, and judicial review.

PSC 318 POLITICAL PARTIES AND INTEREST GROUPS**1 Course***Prerequisite: PSC 110 or permission of instructor*

An examination of political parties and interest groups in the United States, two types of political organization whose activities link citizens with government. Special attention is given to the involvement of citizens in these parties and interest groups, and the activities of these organizations in elections and government.

PSC 319 CITIZEN POLITICS**1 Course***Prerequisite: PSC 110 or permission of instructor*

Individual-level politics in the mass society. Topics include socialization, public opinion, political participation, political communications and persuasion, and voting behavior.

PSC 320 COMPARATIVE POLITICAL SYSTEMS**1 Course***Prerequisite: PSC 100 or permission of instructor*

An analytical and comparative study of the structure and dynamics of various political systems in the world such as parliamentary, authoritarian, and totalitarian types, using selected countries as examples.

PSC 325 PUBLIC ADMINISTRATION AND PUBLIC POLICY**1 Course***Prerequisite: PSC 110 or permission of instructor*

An introduction to the study of human behavior in public organizations covering such areas as the role of administrative agencies and commissions, the Office of Management and Budget, and other administrative bureaucracies that help determine the outcome of political decisions. Specific policy areas will be explored to discuss the role bureaucratic organizations play in the policy-making process of public administration.

PSC 330 STATE AND LOCAL GOVERNMENT AND POLITICS **1 Course**

Prerequisite: PSC 110 or permission of instructor

An introduction to the structures, processes, and contemporary problems in the sub-national politics and intergovernmental relationships. Emphasis will be placed on student field work wherever possible.

PSC 335 RESEARCH METHODS **1 Course**

Prerequisite: MAT 104 or permission of instructor

An introduction to the methods and techniques of the scientific analysis of political phenomena. Includes study of research design and execution, paper writing, and the logic of quantitative analysis.

PSC 350 INTERNATIONAL RELATIONS **1 Course**

Prerequisite: PSC 100 or permission of instructor

The relationships among the various nations-states with reference to matters of policy and power. Emphasis is placed on the political, social, economic, and psychological forces that determine the nature of contemporary international relations.

PSC 351 INTERNATIONAL ORGANIZATIONS **1 Course**

Prerequisite: PSC 350

An analysis of the development and evolution of modern international organizations, and the problems and prospects of international integration. Focus on the United Nations system.

PSC 352 THE POLITICS OF DEVELOPING NATIONS **1 Course**

Prerequisite: PSC 320

A comparative analysis of the dynamics of politics and change in certain areas of the Third World, focusing on issues and strategies for effecting political stability and development.

PSC 355 FOREIGN POLICY ANALYSIS **1 Course**

Prerequisite: PSC 350

An examination of forces, structures, and processes that affect foreign-policy formulation. Emphasis on U.S. foreign policy.

PSC 460 PROBLEMS IN POLITICS **1 Course**

Prerequisite: Permission of instructor

An advanced seminar with readings and papers centered around various topics to be designated at the time of registration. May be repeated, provided the topic is not repeated. **NOTE:** See *Schedule of Classes* for current topics and prerequisites.

PSC 480 SENIOR RESEARCH SEMINAR**1 Course**

Prerequisites for Political Science majors-Senior standing; PSC 335; and one PSC 300-level course in research area

Prerequisites for non-majors-Two introductory PSC courses and one advanced PSC course and permission of instructor

An advanced seminar normally taken in the senior year, with readings and research papers centered around topics approved by the instructor(s). Students will be required to develop and carry out a mature research design, and to present and defend the paper both in writing and before the seminar.

PSC 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

PSC 390/490A or B INDEPENDENT STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

PSC 395/495 INTERNSHIP**1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

PSC 397/497A or B TEAM INITIATED STUDY**1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

PSC 398/498 DIRECTED STUDY**1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

PSYCHOLOGY**PSY 100 GENERAL PSYCHOLOGY****1 Course**

Prerequisite: Completion or waiver of MAT 012

A systematic introduction to psychology as a science. This course meets the Social Science Perspective.

PSY 210 INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY**1 Course**

Prerequisite: Completion of the Social Science Perspective and the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement

This course is designed to help students understand and appreciate the many ways in which psychological theories and procedures apply to the world of work and can be used to enhance human productivity and health. The course's emphasis will be on practical applications of psychology and will include topics such as personnel policies and administration, performance management, organizational theory, behavior and development, occupational health, and leadership. **NOTE:** Noncredit for anyone who completed this course when offered as PSY 386.

PSY 231 SOCIAL GERONTOLOGY**1 Course***Prerequisite: Completion of the Social Science Perspective*

An introduction to the psychosocial aspects of aging. Topics will include demographics, psychological and physical changes, health issues, coping mechanisms, stereotypes, support systems, social programs, and death and dying. The course will include representative texts, films, visiting experts, and experiential exercises.

PSY 305 STATISTICS FOR PSYCHOLOGY**1 Course***Prerequisites: PSY 100 and completion or waiver of MAT 012*

Instruction in the use of statistics in psychological research with particular emphasis on knowing the conditions under which various tests are used. Considerable attention also is devoted to computer usage for statistics and data analysis. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

PSY 306 RESEARCH METHODS**1 Course***Prerequisite: PSY 305*

Finding and interpreting the primary psychological literature; designing, conducting, and presenting psychological research. Developing the powers of precise observation, critical thinking, and clear expression. Builds upon the foundation of experimental design and statistics acquired in PSY 305. Includes a series of class research projects culminating in the preparation of an individual research proposal.

PSY 307 PRINCIPLES OF LEARNING WITH LABORATORY**1 Course***Prerequisite: PSY 100*

An examination of traditional learning theory as it has been developed through the use of operant and classical conditioning techniques. The course will draw heavily on research findings from animal studies but also will discuss the application of those findings to human behavior modification, psychopathology, addiction, and education. The laboratory will involve the application of conditioning techniques learned in the course.

PSY 308 COGNITIVE PSYCHOLOGY WITH LABORATORY**1 Course***Prerequisite: PSY 100*

Topics that will be considered are perception, memory, language, concept formation, problem solving, and creativity. The laboratory will involve examination and application of the principles learned in the course.

PSY 309 SOCIAL PSYCHOLOGY**1 Course***Prerequisite: PSY 100*

Effect of social factors upon behavior, motives, attitudes, and personality; and psychological aspects of social groups and institutions.

PSY 311 ABNORMAL PSYCHOLOGY**1 Course***Prerequisite: Any course that meets the Social Science Perspective (including PSY 100)*

A consideration of the dynamics of personality development and the biological, psychological, and sociological factors leading to actions, mentality, and modes of behavior that diverge from normal.

PSY 312 BEHAVIORAL NEUROSCIENCE WITH LABORATORY **1 Course**

Prerequisite: PSY 100 or permission of instructor

A study of the physiological basis of human and animal behavior. Examination of traditional approaches to the study of behavioral neuroscience, as well as consideration of recent developments and relevance to both normal and abnormal behavior will be included. The laboratory includes neuroanatomical dissection and examination of a sheep brain; examination of human brain sections; several electrophysiological studies of neural and sensory functions using invertebrates; and measurement and analysis of human physiological responses to psychological variables, such as stress.

PSY 313 CHILD PSYCHOPATHOLOGY **1 Course**

Prerequisite: PSY 100 or CFS 130 or permission of instructor

An introduction to the fundamental theories, research methods, concepts, and controversies within the field of childhood behavioral and emotional disorders. An emphasis will be placed upon current empirical and theoretical approaches to childhood disorders, including issues in their classification, etiology, and developmental course.

PSY 314 ETHOLOGY WITH LABORATORY **1 Course**

Prerequisite: PSY 100 or B10 100 or 110

The naturalistic study of animal behavior viewed from an evolutionary perspective. An investigation of general principles of behavior shared by many animals as well as specific adaptations. Laboratory emphasizing careful observation and interpretations of the ways animals behave.

PSY 315 HEALTH PSYCHOLOGY **1 Course**

Prerequisite: PSY 100

A course designed for Psychology majors, but with relevance for Nursing majors, Physical Education majors, pre-med and pre-dental students, and interested others. Interdisciplinary in content, the course examines how biological, psychological, and social factors interact with and effect health, chronic disease, health-promotion efforts, medical treatment, and stress management. Course content also will examine sound research principles, alternative or complementary treatments, and application techniques for health-habit changes.

PSY 316 PSYCHOLOGICAL MEASUREMENT **1 Course**

Prerequisite: PSY 305

A study of basic concepts in psychological measurement, test selection, administration, scoring, and interpretation of results.

PSY 320 HISTORY AND SYSTEMS OF PSYCHOLOGY **1 Course**

Prerequisites: PSY 100 and two other PSY courses

A study of the historical and philosophical development of psychological thinking from Descartes to the present.

PSY 321 PERSONALITY THEORY **1 Course**

Prerequisite: PSY 311

A consideration of historical development of contemporary theories in personality.

PSY 323 CLINICAL/COUNSELING METHODS **1 Course**

Prerequisite: PSY 311

An introduction to professional aspects of Clinical/Counseling Psychology. The course will include examination of issues such as assessment, treatment, professional training, certification, and professional ethics. The experiential portion will introduce students to clinical activities, such as keeping a psychological journal, the clinical interview, group process, stress management, dream work, imagery, and behavioral self-management.

PSY 424 SENIOR RESEARCH **1 Course**

Prerequisite: PSY 305 and 306

Each student will design, conduct, and present a psychological experiment as a senior thesis.

PSY 186/286/386/486 SPECIAL TOPICS **1/2 or 1 Course**

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

PSY 390/490A or B INDEPENDENT STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

PSY 395/495 INTERNSHIP **1 to 3 Courses**

Prerequisite: Sophomore, junior; or senior status

See p. 55 of this Catalog.

PSY 397/497A or B TEAM INITIATED STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

PSY 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.

SOCIOLOGY

SOC 100 SOCIOLOGY OF EVERYDAY LIFE **1 Course**

A practical introduction that relates theory, data, and analysis directly to an examination of the sociological imagination. Through readings and exercises, students will learn to apply the ways in which sociology can help them inquire into their own activities and relations with others. This course may be used to meet the Social Science Perspective.

SOC 110 PROBLEMS OF AMERICAN INSTITUTIONS**1 Course**

American society has been changing rapidly during the 20th century. The student will study the ways in which our family, religious, health, economic, political, and educational institutions have changed; why some of these changes are seen as problems and others are not; and the solutions that have been proposed by various groups in our society. This course may be used to meet the Social Science Perspective.

SOC 132 INTRODUCTION TO RACE IN AMERICA (also AFR)**1 Course**

Prerequisite: Completion or waiver of MAT 010

See AFR 132 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

SOC 215 JUVENILE DELINQUENCY**1 Course**

Prerequisite: GSTR 203 or GSTR 210

This course offers an examination of juvenile delinquency as a social construction and traces the development of the juvenile-justice system. Social theories of delinquency are analyzed, along with major intervention strategies. Issues of race, social class, and gender that often color our ideas of delinquent behavior are considered.

SOC 220 CULTURAL ANTHROPOLOGY**1 Course**

Prerequisite: GSTR 100 or GSTR 110

An examination of the role that culture plays in shaping the way human beings live in different societies. Emphasis on the variety of cultural knowledge that people use to give meaning to life, to understand one another, and to organize their behavior. This course may be used to meet the Social Science Perspective.

SOC 223 SOCIAL STRATIFICATION AND INEQUITY**1 Course**

Prerequisite: GSTR 203 or GSTR 210

The sociological study of social class, status, and power. This course examines individual and structural explanations for the generation and maintenance of inequality in the United States, and the influence of stratification on individuals and groups. Topics include theories of stratification; correlates of social position for the upper class, middle class, working class, and the poor; social mobility; and functions/dysfunctions of social inequality. In contrast to race and gender stratification, this course focuses on social-class stratification in particular. A major goal of the course is to understand the significance of social class where before it may have been invisible.

SOC 325 GENDER AND SEX ROLES (also WST)**1 Course**

Prerequisite: SOC 100 or PSY 100 or CFS 130

An examination of the behaviors and expectations of being male and female and the resulting relationships among men and women across the life cycle. Attention is given to current issues of gender roles and socialization, the family, education, employment, social class, and dynamics of social change.

SOC 327 CRIME AND DEVIANCE**1 Course***Prerequisites: SOC 100 and GSTR 203 or GSTR 210*

An examination of the conditions under which deviance is defined and changes over time; how people come to define some persons as different, dangerous and/or immoral; how persons respond to being so defined; and the role of social control agents in the definition of deviance and the treatment of the deviant.

SOC 330 COMMUNITY ANALYSIS: THE APPALACHIAN CASE**1 Course***Prerequisite: One introductory ECO, HIS, PSC, or SOC course*

This course is a study of the history, demography, social structure, and forces promoting social change in the Appalachian rural community. The student will learn a sociological approach to understanding the concept of community, its various systems, institutions, and groups. A community problem-analysis orientation will be followed. While studying the community in Appalachia, other community studies-American, European, and Third-World-will be examined for comparative purposes looking at content and method. This course may be used to meet the African Americans', Appalachians', and Women's Perspective.

SOC 335 METHODS OF SOCIAL RESEARCH**1 Course***Prerequisites: Completion or waiver of MAT 012; and SOC 100; or permission of instructor*

In this course, the way to convert ideas from other Sociology courses into testable hypotheses will be studied. It includes examining various types of research, research design, and methods of collecting data. The student will find and evaluate sociological materials, use descriptive statistics and computers as tools in organizing information, and write a research proposal.

SOC 340 SOCIAL STATISTICS FOR A DIVERSE SOCIETY**1 Course***Prerequisites: Successful completion of both the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement and the Social Science Perspective*

This course provides a basic introduction to descriptive and inferential statistics as used in social-science research. It assumes no previous experience with statistics. Students will learn how social scientists use statistics to describe social phenomena; compute and interpret basic statistics both by hand and using SPSS software; apply the logic of hypothesis testing; and generate and interpret figures and tables. The course will meet 4 hours per week. Noncredit for anyone with credit in PSY 305.

SOC 341 THE SOCIOLOGY OF DEVELOPMENT AND SOCIAL CHANGE: SEMINAR IN WORLD ISSUES SINCE 1945**1 Course***Prerequisites: GSTR 220 and 221 or junior standing; AND a course approved to meet the Practical Reasoning (PR or PRQ) Requirement*

The sociology of development is concerned with sociological studies of causes and processes of social and economic change in the "developing" or Third World countries. This course looks at the social, demographic, and economic structures of nations. It is a study of the human dimensions of societal development. The topics include the history of the world since 1945, theoretical approaches to social change, comparative consideration of the economic and social structures of less-developed countries, and an examination of the relationship between development policy and factors of social change.

SOC 348 COMPARATIVE ANALYSIS OF FORMAL ORGANIZATIONS **1 Course**

Prerequisite: SOC 100, 110, 220, 223, PSC 100, 110, ECO 101, 102, or PSY 100

This study of formal organization begins with a review of the research on total organizations-organizations that serve as places of residence and work, such as the military and some health, social service, and educational institutions-and the research of non-total organizations, which include business and government. Of particular interest will be the impact of formal organizations on their members, as well as an interorganizational look at social forces that lead to changes that affect organizations over time. From this latter perspective, the organizational structure, e.g., goals, authority, and resources, are examined in view of macro-societal forces, such as urbanization, class conflict, and ideologies (cultures and belief systems).

SOC 350 THEORIES GUIDING SOCIOLOGY **1 Course**

Prerequisite: SOC 100

An examination of the major theoretical perspectives in sociology: functionalism role theory, conflict theory, exchange theory, and symbolic interactionism. The student will review major sociological theories comparing them in terms of central concepts and explanations of how patterns of social organization' are created, maintained, and changed.

SOC 360 SOCIAL POLICY STUDIES AND EVALUATION RESEARCH **1 Course**

Prerequisite: SOC 335 or concurrent enrollment

An examination of the use of sociological concepts and findings to address social problems, social policy, and programs promoting social change. Students will study techniques of social program evaluation, social program monitoring, needs assessment, and policy development. The course covers the historical background to applied sociology, issues in the use of sociological knowledge, and selected case studies of applied sociology in various settings.

SOC 436 SOCIOLOGICAL METHODS IN ACTION **1 Course**

Prerequisite: SOC 335

This course is a continuation of SOC 335. Actual field or empirical research will be done, as well as the planning, design, and completion of a research project. The work includes selecting samples, collecting the information needed to test hypotheses, using statistics to understand data, and writing and presenting to peers a report based on research.

SOC 461 FIELD EXPERIENCE IN SOCIAL POLICY STUDIES **1 Course**

Prerequisites: SOC 360 and permission of instructor

An in-service training experience working as an applied sociologist with a program. Students will learn how to use critical thinking to analyze problems, develop research plans designed to provide solutions to these problems, carry out research in the field, critically analyze the data collected into findings, and write organized reports that set forth the policy implications of the findings. Under the academic direction of a staff member in the Department of Sociology, the student will work in a setting that focuses on the creation and evaluation of social policy, e.g. business, service agency, community group, or governmental or judicial sector. In addition to spending the equivalent of a full day each week in the field placement, students will meet together for a weekly seminar.

SOC 186/286/386/486 SPECIAL TOPICS**1/2 or 1 Course**

*Prerequisites: Determined by instructor
See p. 54 of this Catalog.*

SOC 390/490A or B INDEPENDENT STUDY**1 Course**

*Prerequisite: Sophomore or junior standing for 390; senior standing for 490; SOC 100, 335, and 350
See pp. 54-55 of this Catalog.*

SOC 395/495 INTERNSHIP**1 to 3 Courses**

*Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.*

SOC 397/497A or B TEAM INITIATED STUDY**1 Course**

*Prerequisite: Sophomore or junior standing for 397; senior standing for 497; SOC 100, 335, and 350
See pp. 54-55 of this Catalog.*

SOC 398/498 DIRECTED STUDY**1 Course**

*Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.*

SUSTAINABILITY AND ENVIRONMENTAL STUDIES**SENS 100 INTRODUCTION TO SUSTAINABILITY AND ENVIRONMENTAL STUDIES****1 Course**

Prerequisite: Completion or waiver of MAT 012

The concept of sustainability is explored as it relates to human-dominated and natural ecosystems at spatial scales from local to global. The major environmental problems facing the United States and the world are evaluated in terms of interactions among ecological, social, economic, and spiritual factors. Emphasis is placed on understanding the scientific approaches by which environmental risk is assessed and sustainability is measured. Local ecosystems will be used as a context for learning. Three lectures and one laboratory/field study each week. This course may be used to meet the Practical Reasoning (PR) Option.

SENS 210 SUSTAINABLE APPALACHIAN COMMUNITIES (also GST)**1****Course**

Prerequisite: GSTR 203 or GSTR 210

An introduction to the concept of sustainability as applied to communities in the Appalachian region. Ecological, social, and economic characteristics of Appalachia are reviewed as a context for case studies of communities within the region. A variety of approaches to sustainable development are explored. Students learn techniques for evaluating community sustainability, and participate in a service-learning or community-based research project that assists a local community to become more sustainable. This course may be applied toward the Appalachian Studies minor and the Sustainability and Environmental Studies minor.

SENS 310 ECOLOGY**1 Course***Prerequisite: A laboratory-science course*

An introduction to the basic ecological principles of terrestrial and aquatic systems. Emphasis is placed on experiential learning through field and laboratory studies. Principles of energy flow, material cycles, physiological ecology, population ecology, ecological succession, community ecology, and biological diversity are addressed. Hands-on exercises and experiments are integrated with lectures, discussion groups, student research projects, and computer exercises to demonstrate the process of scientific inquiry into ecological issues. Two class periods and one laboratory period each week. This course may be used as credit toward the Sustainability and Environmental Studies minor.

SENS 320 INTRODUCTION TO GEOGRAPHICAL INFORMATION SYSTEMS 1 Course*Prerequisite: MAT 110 (no longer offered at Berea), 115, 125, or permission of instructor*

An introduction to the basic principles of Geographical Information Systems (GIS), and the related technology of Geographical Positioning Systems (GPS), through demonstration and practice with GIS software. Examples from a variety of disciplines will be presented to illustrate how GIS are used to manage spatial data. Students will develop beginning competency in applying GIS software to example problems. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. NOTE: Noncredit for students who have completed this course as SENS 386.

SENS 340 INTRODUCTION TO ECOLOGICAL DESIGN**1 Course***Prerequisite: GSTR 232, GSTR 332, or a laboratory-science course*

An exploration of the principles and practice of ecological design—the application of ecological principles to the design of sustainable technologies, buildings, communities, and landscapes. The focus of the course is on understanding how ecological knowledge informs the basic approach to design. Primary ecological concepts such as the individual-population-community framework, energy flow, and material cycles are used as the foundation for design tools, with emphasis on the use of these tools both to achieve sustainability and to regenerate the earth's ability to support life. The importance of community participation and ownership of the design process is introduced in the form of participatory methods for design. Laboratory exercises and group projects provide opportunities for experiential learning through the application of ecological design principles to the solution of real problems, with particular focus on the Berea College campus and its surroundings. Three lectures each week and one laboratory.

SENS 345 ECOLOGICAL ARCHITECTURE**1****Course***Prerequisite: One of the following courses—SENS 340, ART 246, TEC 111, or TEC 130*

A survey of the developing field of ecological, or “green,” architecture. Topics include innovative design methodology, alternative building materials, energy conservation and renewable energy sources, indigenous architecture, and ecologically engineered waste management systems. Material will be presented in the context of a dialogue between conventional and ecological architecture. Laboratory exercises are complemented by experiential learning through student involvement in campus and community building projects.

SENS 460 CAPSTONE COURSE FOR SUSTAINABILITY AND ENVIRONMENTAL STUDIES **1 Course**

Prerequisites: Declared SENS minor; SENS 100 and completion or concurrent enrollment in all other SENS minor requirements

Advanced analysis of a current sustainability and environmental issue integrating the diverse knowledge, experiences, and points of view that students have developed in the SENS minor. This course integrates elements of the natural sciences, social sciences, and humanities, and emphasizes specific problem solving as well as abstract thinking. Students are expected to process and synthesize complex concepts and ideas by drawing upon the fundamentals learned in SENS 100, the breadth gained from their selection of electives, and their specific skills and perspectives developed through the experiential component.

SENS 186/286/386/486 SPECIAL TOPICS **1/2 or 1 Course**

Prerequisites: Determined by instructor
See p. 54 of this Catalog.

SENS 390/490A or B INDEPENDENT STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.

SENS 394/494 EXPERIENTIAL LEARNING PROJECT **Noncredit Course**

Prerequisites: SENS 100 and approval of the SENS Director

An experiential learning activity that normally occurs beyond the classroom setting, may be on or off campus, and will involve students in activities central to SENS learning objectives under the direction of a SENS faculty member. Successful completion of a SENS 395/495 (Internship), 140 hours in an approved labor position, or a student-faculty undergraduate research project may satisfy this requirement.

SENS 395/495 INTERNSHIP **1 to 3 Courses**

Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.

SENS 397/497 A or B TEAM INITIATED STUDY **1 Course**

Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.

SENS 398/498 DIRECTED STUDY **1 Course**

Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

TECHNOLOGY AND INDUSTRIAL ARTS

TEC 110 TECHNOLOGY I

1 Course

A course relating the fundamentals of technology with emphasis on the study of tools, processes, materials, and organizational structures that provide goods and services to society. The major units to be investigated include communications, power, energy, and transportation. This course may be used to meet the Practical Reasoning (PR) Option. Course Fee: \$10.

TEC 111 TECHNOLOGY II

1 Course

A course relating the fundamentals of technology with emphasis on the study of tools, processes, materials, and organizational structures that provide goods and services to society. The major units to be investigated include materials and processes, manufacturing, and construction. Course Fee: \$10.

TEC 118 HISTORY OF TECHNOLOGY

1 Course

A study of the impact of technological advancements throughout history, including changes to social institutions, such as government, education, and religion. Emphasis is placed on the changes brought about by the exponential growth of technology since the Industrial Revolution. This course may be used to meet the Western History Perspective.

TEC 130 ENGINEERING GRAPHICS

1 Course

A study of the fundamentals of engineering graphics using both manual and computer-aided systems. Topics may include sketching, orthographic projection, dimensioning, pictorial drawings, and architectural drawings, as they relate to production. Course Fee: \$10.

TEC 140 PRODUCTION TECHNOLOGY IN WOODS

1 Course

A study of selected production processes through considerations of wood and wood materials. The course encompasses material properties, ergonomic design, prototyping, production design, and primary and secondary processing. Instruction will include material selection, design, problem solving, fabrication, and finishing. Course Fee: \$10.

TEC 180 GRAPHIC COMMUNICATION

1 Course

A study of the fundamental materials, processes, and technology used in graphic communications. Topics may include layout and design, printing methods, photography, digital imaging, and desktop publishing, for both print and electronic media. This course may be used to meet the Arts Perspective. Course Fee: \$10.

TEC 202 PHOTOGRAPHY

1 Course

Prerequisite: GSTR 100 or GSTR 110

This course will explore the materials, processes, and techniques used in photography. Topics may include cameras, exposure, film processing, printmaking, and digital imaging. Throughout the course, consideration will be given to both the technical and aesthetic aspects of photography. This course may be used to meet the Arts Perspective. Course Fee: \$15.

TEC 213 APPALACHIAN CRAFTS**1 Course***Prerequisite: GSTR 100 or GSTR 110*

A laboratory course involving work in various craft media including metal, wood, textiles, ceramics, and various native Appalachian materials. Through these various craft media, the culture of the Appalachian people will be examined focusing on factors affecting the life and work of the Appalachian craftsman, including aesthetics versus function, advancing technology, and outside influences. Through skill development, students will gain insight into the problem-solving ability, lifestyle, and ingenuity of the Appalachian people. Opportunities will be given for in-depth study and skill development. This course may be used to meet the African Americans', Appalachians', and Women's Perspective. Course Fee: \$10.

TEC 218 METHODS OF TEACHING TECHNOLOGY EDUCATION**1 Course***Prerequisite: GSTR 100 or GSTR 110, or permission of instructor*

A study designed to examine the varied methods of presentation, lab management, demonstration, and course planning for teaching technology in grades 5-12.

TEC 250 PRODUCTION TECHNOLOGY IN METALS**1 Course***Prerequisite: Completion or waiver of MAT 011; or permission of instructor*

A study of selected production processes using metal materials. The course encompasses material properties, design, prototyping, problem solving, and production design. Instruction also will include the cutting, forming, fastening, machining, casting, and finishing of metals. Course Fee: \$10.

TEC 251 METAL CASTING**1 Course***Prerequisite: Completion or waiver of MAT 011; or permission of instructor*

This course will provide an in-depth study of non-ferrous metal casting tools, materials, and processes. Subjects to be explored include patterns and pattern making, mold design, mold making, molding, properties and uses of metals, and discussions of the state-of-the-art foundry operations. Use of the microcomputer as a design tool and problem-solving device in several aspects of foundry study will be emphasized. Course Fee: \$15.

TEC 265 ELECTRICAL FUNDAMENTALS**1 Course***Prerequisite: Completion or waiver of MAT 011; or permission of instructor*

A study of alternating current (AC) and direct current (DC). Topics may include circuits, resistance, power, solid state devices, and use of electrical measuring instruments. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement. Course Fee: \$10.

TEC 275 POWER TECHNOLOGY**1 Course***Prerequisite: Completion or waiver of MAT 011; or permission of instructor*

A study of the design and operation of power-related devices with provision for in-depth study and research. Topics may include power-conversion systems, power-transfer systems, and alternative energy. Course Fee: \$10.

TEC 330 COMPUTER AIDED DRAFTING AND DESIGN**1 Course***Prerequisite: TEC 130 or permission of instructor*

An advanced study of engineering graphics and design using computerized systems. Emphasis will be placed on problem solving, three-dimensional technical drawings, and applications of CADD. Course Fee: \$10.

TEC 340 ADVANCED STUDIES IN WOODWORKING**1 Course***Prerequisite: TEC 140 or permission of instructor*

An advanced study of fine woodworking encompassing traditional and modern methods with an emphasis on design, aesthetics, and quality of construction. The course includes a study of furniture styles, ergonomic design, material properties, joinery, and traditional and contemporary construction methods. The structure of the course will provide additional emphasis on solution of specific problems of design and material applications. Course Fee: \$10.

TEC 352 QUALITY CONTROL**1 Course***Prerequisite: TEC 130, MAT 105, completion or waiver of either MAT 110 (no longer offered at Berea) or MAT 115; or permission of instructor*

This course is designed to include the study of the history and foundations of quality control; quality-assurance program elements; the research of program problems; sampling and sampling techniques; inspection devices; statistical control; techniques of statistical process control; elements of time and motion study; and the application of computers in quality-assurance programs. This course may be used to meet the Practical Reasoning with Quantitative Emphasis (PRQ) Requirement.

TEC 382 COMPUTER GRAPHICS**1 Course***Prerequisite: TEC 180 or permission of instructor*

An in-depth study in various methods of using computers to generate, manipulate, and present graphic images. Topics may include: graphic design, digital photography, digital illustration, desktop publishing, Web-page design, and multi-media production. Course Fee: \$10.

TEC 392 WORK LEARNING EXPERIENCE**Noncredit Course***Prerequisite: Admission to major or permission of instructor*

Student Labor learning experiences of at least one year (two regular terms or equivalent) related to the student's major. Required of all majors.

TEC 455 COMPUTER INTEGRATED MANUFACTURING**1 Course***Prerequisite: TEC 130, MAT 105, completion or waiver of either MAT 110 (no longer offered at Berea) or MAT 115; or permission of instructor**Offered: Typically alternate years (next offered Fall 2006)*

A study of contemporary applications and integration of the computer in manufacturing processes, production systems, product performance simulations; and plant design. This course will include practical experience in CAD/CAM integration and robotics applications. Course Fee: \$10.

- TEC 460 SOLID STATE ELECTRONICS** **1 Course**
Prerequisite: TEC 265 or permission of instructor
A study of electronics based on the analysis, function, and operation of selected discrete and integrated solid-state devices. Topics may include solid-state power supplies, discrete control devices, and linear and digital solid-state circuits. Course Fee: \$10.
- TEC 470 ADVANCED POWER TECHNOLOGY** **1 Course**
Prerequisite: TEC 275 or permission of instructor
In-depth study in areas of engine performance, energy conservation, fluid power, and developmental power sources as they apply to industry and agriculture. Will include study of common methods of power transmissions. Course Fee: \$10.
- TEC 186/286/386/486 SPECIAL TOPICS** **1/2 or 1 Course**
Prerequisites: Determined by instructor
See p. 54 of this Catalog.
- TEC 489 SEMINAR IN TECHNOLOGY** **1 Course**
Prerequisite: Senior standing or permission of instructor
Concepts not offered in the laboratory courses will be presented. Included will be selected philosophic, historic, and current issues related to Technology and Industrial Arts.
- TEC 390/490A or B INDEPENDENT STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 390; senior standing for 490
See pp. 54-55 of this Catalog.
- TEC 395/495 INTERNSHIP** **1 to 3 Courses**
Prerequisite: Sophomore, junior, or senior status
See p. 55 of this Catalog.
- TEC 397/497 A or B TEAM INITIATED STUDY** **1 Course**
Prerequisite: Sophomore or junior standing for 397; senior standing for 497
See pp. 54-55 of this Catalog.
- TEC 398/498 DIRECTED STUDY** **1 Course**
Prerequisite: Will vary, but always will include permission of instructor
See p. 55 of this Catalog.

WOMEN'S STUDIES

WST 124 INTRODUCTION TO WOMEN STUDIES

1 Course

Prerequisite: Admission to Women's Studies major; or permission of instructor

What is Women's Studies? What is feminism? What have been the historic roles of women in the United States? In the world? How are women's experiences similar? How do they differ? How do class, race, and ethnicity shape women's development? Any student who has ever asked her/himself any of these questions can begin to explore answers in this introductory course in Women's Studies. The interdisciplinary field of Women's Studies draws from the often neglected experience of women in order to describe, analyze, and more fully understand the gendered world order. Students will read several primary-source selections from each of the different eras of the international feminist movement, as well as complementary texts in women's history and literature. This introduction to Women's Studies will engage students in a deeply personal and academic journey that involves classroom discussion of individual's perceptions and critiques, journal responses to both discussion and reading, and a media project analyzing cultural images of women.

WST 135 AFRICAN-AMERICAN WOMEN WRITERS

1 Course

(also AFR and ENG)

How have African-American women writers coped with invisibility? How have they emerged from silence and created visions of identity and culture? This course will examine the writings of African-American women as a separate and distinct cultural group and the ways in which their writing is an expression of the culture and a historical record of its development.

WST 202 WOMEN AND AFRICAN AMERICANS IN POLITICS

1 Course

(also AFR and PSC)

Prerequisite: GSTR 203 or GSTR 210

See PSC 202 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective. **NOTE:** In order to receive African and African American Studies or Women's Studies major or minor credit, the student's major project must focus on African Americans or women, respectively.

WST 207 FAMILY RELATIONS (also CFS)

1 Course

Prerequisite: GSTR 100 or GSTR 110

See CFS 207 for course description. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and the Social Science Perspective.

WST 211 WOMEN IN RELIGION (also REL)

1 Course

Prerequisite: GSTR 100 or GSTR 110

See REL 211 for course description.

WST 212 LITERATURE OF CARIBBEAN WOMEN (also AFR and ENG) 1 Course

Prerequisite: GSTR 203 or GSTR 210

This course is an exploration of voices of women in the Caribbean. We will read works by writers from the Anglo-Caribbean, French Caribbean, and Hispanic Caribbean. These writers represent the islands of Jamaica, Cuba, Guadelupe, Haiti, the Dominican Republic, and Barbados. Their works investigate issues of racial configuration, relationships between women, politics, colonialism and post-colonialism, and the creation of the island space. We will look at the long, turbulent history of the island of Hispaniola from the perspective of both the Haitian and Dominican, the complex history of each of these island nations, and other important topics. This course may be used to meet the African Americans', Appalachians', and Women's Perspective and a World Culture (Non-Western) component of the International Perspective.

NOTE: Noncredit for students who took this course as GSTR 209.

WST 223 THEOLOGIES OF LIBERATION (also REL) 1 Course

Prerequisite: GSTR 100 or GSTR 110

See REL 223 for course description.

WST 228 GENDER IN THE MODERN WEST, 1750-PRESENT (also HIS) 1 Course

Prerequisite: HIS 101 or HIS 226; OR HIS 102 or HIS 227; OR GSTR 203 or GSTR 210

See HIS 228 for course description.

WST 237 WOMEN AND LITERATURE (also ENG) 1 Course

Prerequisite: Sophomore standing

See ENG 237 for course description.

This course counts toward the Women's Studies major and minor, if taken under the WST rubric.

WST 244 SERVICE, CITIZENSHIP, AND INJUSTICE (also GST) 1 Course

Prerequisite: GSTR 203 or GSTR 210

See GST 244 for course description.

This course counts toward the Women's Studies major and minor, if taken under the WST rubric.

WST 315 CLASSIC TEXTS IN WOMEN'S STUDIES 1 Course

Prerequisite: WST 124

A study of the Western version of the Women's Studies canon, with readings spanning the last two centuries in history, philosophy, literature, psychology, sociology, biography, and critical theory. Both old and new classic texts will be paired together to help students develop a coherent narrative about gender and sexuality over the past two hundred years. In addition, the idea of a "canon" will be raised as a problematic issue in a rapidly changing academic field.

WST 325 GENDER AND SEX ROLES (also SOC) 1 Course

Prerequisite: SOC 100 or PSY 100 or CFS 130

See SOC 325 for course description.

WST 366 CROSS-CULTURAL PERSPECTIVES ON FAMILY (also CFS) 1 Course

Prerequisite: SOC 100 or permission of instructor

See CFS 366 for course description. This course may be used to meet a World Culture (Western) component of the International Perspective.

WST 401 ADVANCED STUDIES IN FEMINISM 1 Course

Prerequisite: WST 315

An exploration of diverse academic theories and feminist philosophies as these apply to current and historical conditions. This course will interrogate theories of gender, women's subjectivity, social identity, and political agency.

WST 458 SENIOR SEMINAR IN WOMEN'S STUDIES 1 Course

Prerequisites: WST 124 and senior standing; or permission of instructor

A curriculum in Women's Studies offers students an opportunity to enhance their world view by investigating the contributions and experience of girls and women throughout the world. Acknowledging and understanding the status of women in the world is a process that requires practice in the identification and solution of problems. The course explores how feminist theory and methodology provide critical perspectives that lead to transformative social practices. In particular, the Senior Seminar provides students with a more in-depth exploration of Women's Studies that includes relevant personal experiences, theoretical modeling, and direct application of knowledge gained from the program (in either an academic or applied research project). In this course, students actively will determine how their education in Women's Studies will be reflected in their contributions the world.

WST 186/286/386/486 SPECIAL TOPICS 1/2 or 1 Course

Prerequisites: Determined by instructor

See p. 54 of this Catalog.

WST 390/490A or B INDEPENDENT STUDY 1 Course

Prerequisite: Sophomore or junior standing for 390; senior standing for 490

See pp. 54-55 of this Catalog.

WST 395/495 INTERNSHIP 1 to 3 Courses

Prerequisite: Sophomore, junior, or senior status

See p. 55 of this Catalog.

WST 397/497 A or B TEAM INITIATED STUDY 1 Course

Prerequisite: Sophomore or junior standing for 397; senior standing for 497

See pp. 54-55 of this Catalog.

WST 398/498 DIRECTED STUDY 1 Course

Prerequisite: Will vary, but always will include permission of instructor

See p. 55 of this Catalog.