

#### A S 2016-APPALACHIAN MUSIC

A survey of Appalachian music including both instrumental and vocal styles, older traditions and newer regional forms. Students will have opportunities to develop musical skills through hands-on class projects and activities. Lecture three hours.

#### A S 2200-APPALACHIAN STORIES

Introduction to the literature of Appalachia with an emphasis on the multiplicity of narrative forms in the region. This course examines both historical and contemporary Appalachian literary expression as well as local, regional, national, and international perspectives on the literature of the region. Students read and study oral narratives, exploration narratives, travel writing, memoir, autobiography, song lyrics, and nature writing, in addition to fiction, poetry, and drama. The course also explores how literary production comments on and participates in the construction of Appalachia.

#### A S 2301-HISTORY COAL PA TO PRESENT

Coal has played a critical role in the history of the southern Appalachians. The geologic processes that formed coal and shaped the landscape into the steep ridges and hollows of the Appalachian coalfields have directly affected the human history of the region – from hunting in pre-colonial times, to settlement and subsistence farming in the 1800s, to mining and unionization in the 1900s, to mountaintop removal and natural gas/coalbed methane extraction in the last decade. This course covers the physical and chemical processes that form coal as well as the tectonic and geomorphologic processes that formed the landscape of the coalfields and shaped the agricultural practices of the early settlers. It examines the cultural history of coal mining and life in the company-owned coal camps and the political history of unionization through literature and film. The economics and environmental consequences of coal-fired power plants are discussed, and the environmental and occupational hazards associated with both underground and surface coal mining are analyzed from both a scientific and a sociological perspective. (Same as GLY 2301.)

#### A S 2411-APPALACHIA: INTRO (SOCIAL SCI)

This course explores the Appalachian region from a cross-disciplinary perspective, with readings on Appalachia drawn primarily from the social sciences. Both historical and contemporary issues are examined, focusing upon national and international as well as local and regional contexts. This course provides an introduction to the Bachelor of Arts degree in Appalachian Studies and to the undergraduate minor in Appalachian Studies. (WRITING; MULTI-CULTURAL; CROSS-DISCIPLINARY) (CORE: SOCIAL SCIENCES)

#### A S 2515-SOPHOMORE HONORS COLLOQUIUM

Seminar on a selected topic or topics in Appalachian Studies, encouraging independent scholarship through reading, writing and discussion. Enrollment is by invitation or application. Content will vary. (WRITING; MULTI-CULTURAL; CROSS-DISCIPLINARY) (CORE: HUMANITIES)

#### A S 3000-DIVERSITY IN APPALACHIA

GEN ED: Junior Writing in the Discipline (WID)

Diversity in Appalachia considers gender and/or ethnic diversity in the Appalachian region from interdisciplinary perspectives, and may focus on women, gender, ethnic diversity, or one or more ethnic communities. Content may vary. Prerequisite: ENG 2001 or its equivalent. (WRITING)

A S 3030-BLUEGRASS TRADITIONS

A S 4015-OLD TIME MUSIC TRADITIONS

A multi-cultural study of old time music and its roots, with interdisciplinary approaches from the humanities and social sciences.

Lecture three hours. (MULTI-CULTURAL; CROSS-DISCIPLINARY) [Dual-listed with AS 5015.]

Dual-listed courses require senior standing; juniors may enroll with permission of the department.

A S 4110-ETHNOGRAPHIC FIELD STUDY

Variable content. Course involves immersion in a field setting either in the U.S. or through study abroad. Topics, approach, and field

sites will be indicated on course syllabi and semester schedules. (MULTI-CULTURAL)

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A S 4510-SENIOR HONORS THESIS

Independent study and research. Honors thesis directed by a member of the Appalachian Studies faculty and graded by a committee

appropriate for the topic. Oral presentation. Prerequisite: AS 2510 or AS 2515 with a grade of "B" or higher. (WRITING)

A S 4550-SENIOR SEMINAR

GEN ED: Capstone Experience

This final capstone seminar provides students the opportunity for a synthesis of theoretical perspectives on the region as they influence

interpretations of historical and contemporary issues shaping the region; for understanding local to global connections; for

considering the confluence of ecological, economic and social uses which intersect in this region; and for debating the obligations

of community membership. Students will prepare a portfolio in preparation for careers and post-graduate opportunities. (WRITING;SPEAKING; CROSS-DISCIPLINARY)

ANT 1415-UNDERSTANDING CULTURE

GEN ED: Historical and Social Perspective (Theme: "Cultural Diversity"); Local to Global Perspective (Theme: "Empire, Colonialism, and Globalization")

This course explores the diversity and unity of human experience through the lens of cultural anthropology. Using case studies and other texts, students will gain familiarity with different cultural worlds. As they do so, they will be asked to think critically about

Anthropology The College of Arts and Sciences

their own cultural ideas and actions, to reflect on problems facing humanity in the contemporary world, and to understand the various

ways in which they are historically and socially connected to other people in other places.

(MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

ANT 2215-CULTURAL ANTHROPOLOGY

The course consists of a critical introduction to fundamental ethnographic concepts, theories, methods, textual representations, and

contemporary issues and debates encompassed by the sub-discipline of cultural anthropology.

(MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

ANT 2222-THE LIVING PRIMATES

ANT 2310-APPALACHIAN CULTURE

A cultural survey of rural and urban Appalachia. A brief history of the region is followed by a discussion of the contemporary social,

economic, political, and cultural characteristics of the people. The impact of processes of change, including migration, urbanization,

industrialization, and resource exploitation, are explored. (WRITING; CROSS-DISCIPLINARY)

ANT 2400-NATIVE AMERICA THR ETHNOGRAPHY

An ethnographic survey of the American Indian cultures from northern Mexico to the Arctic. Also the modern Indian condition is

considered. (MULTI-CULTURAL)

ANT 3120-FIELD ARCHAEOLOGY

An introduction to methods and techniques of archeological site survey, mapping, and excavation. Students participate in fieldwork on

one or more actual archeological sites. Prerequisite: ANT 2221 or permission of the instructor.

(NUMERICAL DATA) (ND Prerequisite:

passing the math placement test or successful completion of MAT 0010.)

ANT 3250-ARCHAEOLOGIC LAB METHODS

Trains students in the processing and analysis of materials recovered from archeological sites such as artifacts, ecofacts, and sediment

samples. Numerical data are produced and analyzed using computer data base systems.

Lecture two hours, laboratory two

hours. Prerequisite: ANT 2221. (NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful

completion of MAT 0010.)

ANT 3320-PRIMATOLOGICAL FIELD METHODS

An introduction to the planning, conduct, and presentation of scientific research in the field of primatology. This course will familiarize students with field methods used in primate ethology and tropical ecology (including field and laboratory methods), and students will receive hands-on field research training in field methods used in habitat and trail mapping, primate censuses and surveys, collection of behavioral data, collection of botanical data, and monitoring of ecological variables. Each student will design and conduct, and present an independent research project on a topic of their choice related to primate behavior and ecology. Course may be taught as a field course in Costa Rica, Indonesia, or other primate habitat countries.

#### ANT 3350-PRIMATE BEHAVIOR & ECOLOGY

An overview of primate diversity and the ways in which primates adapt physically and behaviorally to their environments. Relevant theoretical developments in ecology, evolution, and primatology will be discussed and critically analyzed. Topics include primate diversity and phylogeny, morphology, diets and feeding adaptations, anti-predator strategies, social organization and mating systems, life histories, competition and cooperation, cognition, communication, and conservation biology.

#### ANT 3610-ANTHROPOLOGY OF ENV JUSTICE

#### ANT 3620-POLITICAL ECOLOGY & SUSTAINAB

#### ANT 3635-POLITICAL ANTHROPOLOGY

#### ANT 3670-ECONOMIC ANTHROPOLOGY

GEN ED: Junior Writing in the Discipline (WID)

This course examines the material dimensions of social life from several theoretical perspectives: formalist, substantivist, Marxist, and contemporary forms of political economic analysis. It also surveys past and current forms of production, distribution and consumption, including ongoing efforts to establish economic alternatives to global capitalist development.

Prerequisite: ENG 2001 or

its equivalent. (WRITING

#### ANT 3680-ENVIRONMENTAL ANTHROPOLOGY

#### ANT 3810-ENGAGING ANTHROPOLOGY

#### ANT 3900-ETHNOGRAPHIC FIELD SCHL

Students will be immersed in a particular cultural context and learn to use standard ethnographic techniques to analyze and interpret the culture. Each student will live in a local community, participating in its daily activities. There will be instruction in the use of qualitative methods, such as observation, mapping, genealogies and life histories, formal interviewing, and cultural domain analysis. A research paper on a topic selected in consultation with the instructor will be required. Prerequisite: ANT 2215 or permission of the instructor. (WRITING; MULTI-CULTURAL)  
ANT 4240-POLITICS OF ETHNICITY

ANT 4241-CAPSTONE:POLITICS OF ETHNICITY

ANT 4250-BIOLOGY, TECHNOLOGY & CULTURE

ANT 4251-CAPSTONE:BIOLOGY,TECH&CULTURE

ANT 4565-AGRARIAN STUDIES & RURAL DEV

Descriptive and theoretical analysis of peasantry in the context of world economic and political systems in the face of globalization. Explores the political economy of rural development and prospects for sustainable development from a comparative perspective. (MULTI-CULTURAL) [Dual-listed with ANT 5565.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.  
ANT 4610-ANTHROPOLOGY OF ENERGY

ANT 4611-CAPSTONE:ANTHROPOL OF ENERGY

BIO 1101-BIOLOGY IN SOCIETY I

GEN ED: Science Inquiry Perspective (Theme: "Biology and Society")  
This course will focus primarily on issues relating to life at the level of the organism inward. The course will examine the broad concepts of how life is defined by the processes of heredity, reproduction and metabolism. These concepts will be examined by studies of societal issues such as cancer, nutrition, gene therapy, patterns of inheritance, drug therapy, and evolution at the cellular level. Lecture three hours, laboratory two hours. (CORE: NATURAL SCIENCES) (NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)  
BIO 1101 WILL NOT SUBSTITUTE FOR BIO 1801 FOR SCIENCE MAJORS.

BIO 1102-BIOLOGY IN SOCIETY II

GEN ED: Science Inquiry Perspective (Themes: "Biology and Society" and "Life, Earth, and Evolution")

This course will primarily focus on issues relating to life at the level of the organism outward. The course will examine the broad concepts of evolutionary processes, the interdependent nature of living organisms, the diversity of life, and the evolution of organ systems. These concepts will be examined by studies of societal issues such as the biodiversity crisis, human evolution, plants and agriculture, the threats from microbes, and issues in conservation ecology. Lecture three hours, laboratory two hours. (CORE: NATURAL SCIENCES) (NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

BIO 1103-GLBL CLIMT CHNG & EARTH'S LIFE

GEN ED: Science Inquiry Perspective (Theme: "Global Environmental Change")

A course examining the effects of global climate change on earth's organisms. Lecture combines biological concepts with current knowledge and predictions to provide a broad introduction to key changes possible in earth's biota in a future world. Laboratory provides a hands-on approach to investigating climate change questions. Submission of online essays, group discussions and summary reports from laboratory experiments required. Lecture three hours, laboratory two hours.

BIO 1201-BIOLOGY IN SOCIETY I

BIO 1202-BIOLOGY IN SOCIETY II

BIO 1203-BIOLOGY IN SOCIETY LABORATORY

BIO 1801-BIOLOGICAL CONCEPTS I

This course will investigate the history of science and the scientific method, the chemical basis of life, cell biology, bioenergetics, DNA structure and function, as well as general and molecular genetics. The course will cover the evolutionary basis of life and the application of evolutionary theories to the study of life. Lecture three hours, laboratory three hours. Corequisite: CHE 1101.

Biology The College of Arts and Sciences

UNLESS NOTED, BIO 1801 IS THE MINIMUM PREREQUISITE FOR ALL BIO COURSES NUMBERED 2000 AND ABOVE.

BIO 1802-BIOLOGICAL CONCEPTS II

The course will cover the development and application of evolutionary theory to the study of organismal biology. Course material will include discussions of the classification and evolutionary relationships of the domains of life, principles of plant and animal physiology, and overviews of population biology and ecology. Lecture three hours, laboratory three hours. Prerequisite: BIO 1801 with a grade of "C" or higher.

ALL BIOLOGY MAJORS MUST COMPLETE BIO 1801 & BIO 1802 BEFORE TAKING ANY OTHER BIOLOGY COURSE FOR THE MAJOR.

BIO 1999-EXPERIENTIAL LEARNING

Survey of the major topics in plant biology including physiology, morphology, ecology, evolution, aspects of plant diversity and water relations in plants. Lecture three hours, laboratory three hours.

#### BIO 2000-INTROD TO BOTANY

Survey of the major topics in plant biology including physiology, morphology, ecology, evolution, aspects of plant diversity and water relations in plants. Lecture three hours, laboratory three hours.

#### BIO 2001-INTROD TO ZOOLOGY

Integrated and phylogenetic study of the animal kingdom. The basic biological problems facing animals will be considered in the context of morphology and evolutionary history. Lecture three hours, laboratory three hours.

#### BIO 2012-INTRO EVOLUTIONARY BIOL

An introduction to the study of evolution including a summary of the stratigraphic record, an historical summary of the earth and its major floral and faunal groups, a review of major contributions to evolutionary theory, and a summary of the factors thought to cause evolutionary change. Lecture three hours. Prerequisites: BIO 1801 and BIO 1802.

#### BIO 2200-HUMAN MICROBIOLOGY

The main objective of this course is to present the basic principles of microbiology and the nature of microbial diseases to students pursuing health-related fields. The course will focus on microorganisms which are pathogenic to humans, the diseases they cause and the treatment and prevention of those diseases. Lecture three hours, laboratory three hours. Prerequisites: CHE 1101, CHE 1110, and CHE 1102, CHE 1120. Note: BIO 2200 is not open to biology majors for credit.

#### BIO 2400-GENETICS

This course will cover aspects of transmission genetics, cytogenetics, molecular genetics and the importance of genetics to an understanding of evolution and population dynamics. The genetics of viruses, prokaryotes, and eukaryotes will be studied.

Prerequisites: BIO 1801, CHE 1102, and MAT 1025. Lecture three hours. Students cannot receive credit for both BIO 2400 and BIO 2700. (NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### BIO 2410-GENETICS LABORATORY

Laboratory investigations of genetic systems in plants, animals, and fungi. Prerequisite or corequisite: BIO 2400 or BIO 2700.

Laboratory three hours. (WRITING; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### BIO 2600-CELL BIOLOGY

Cell biology provides an opportunity to discover in detail the inner workings of cells. Discussion topics include biomolecules, bioenergetics, organization, movement and regulation as well as the intercellular interactions. Lecture three hours. Prerequisite: CHE 1102.

#### BIO 2610-CELL BIOLOGY LABORATORY

Laboratory exercises will provide an opportunity to experience how scientists learn about cells. Experiments will use modern techniques to probe cellular structure, composition and function. Laboratory three hours. Prerequisite: MAT 1025 or equivalent. Prerequisite or corequisite: BIO 2600.

#### BIO 2700-HUMAN GENETICS

This course examines the principles of genetics from a human perspective. The history of genetic thought will be discussed, as well as pedigree analysis, genetics of human disease, human population genetics, and selected topics on the Human Genome project, behavior, and multifactorial traits. Prerequisites: BIO 1801, CHE 1102, and MAT 1025. Students cannot receive credit for both BIO 2400 and BIO 2700.

#### BIO 2800-BIOTECHNOLOGY & SOCIETY

Alternate years.

A look at how the recent advances in biotechnology affect society and individuals. Special emphasis is placed on the possibilities that biotechnology brings and the decisions it forces on society. Topics include reproductive technology, population problems, extending life, considerations of the ever-changing definition of death, genetic testing and screening, ecological problems, and others as new technological advances develop. Prerequisite: at least one course in biology, sociology, or ethics. (WRITING; SPEAKING)

#### BIO 3301-HUMAN SYSTEMS PHYSIOLOGY

GEN ED: Junior Writing in the Discipline (WID)

A study of the fundamental principles of human physiology with an emphasis on systemic function. Lecture three hours, laboratory three hours. Prerequisites: one semester of organic chemistry (CHE 2201 or CHE 2101); and ENG 2001 or its equivalent. (WRITING; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### BIO 3302-ECOLOGY

A study of the interaction of organisms with their environment. Principles discussed will include natural selection and adaptation, population growth and regulation, interspecific interactions, including competition, predation, parasite-host relationships and mutualism, the structure and function of communities and ecosystems, geographical ecology, and human impacts on the biosphere. STT 2810 recommended. Lecture three hours, laboratory three hours. (NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### BIO 3304-SYSTEMATIC BOTANY

This course begins with the study of plant structure, learning about form and function. Both past and current methods of classification and their theoretical frameworks will be explored. Throughout the semester, in both lecture and lab/field, the tremendous diversity of land plants and the tools used to reconstruct the evolutionary history of plants will be examined. Lecture three hours, laboratory three hours. Prerequisite: BIO 2000 or permission of the instructor.



#### BIO 3308-MICROBIOLOGY

Introduction to the biology of microorganisms, including phylogeny and diversity, growth, metabolism, and genetics. A main objective is to gain appreciation and understanding of diversity and ubiquity of microorganisms. The course also considers the role of microorganisms in human's lives, from ways in which they have shaped our environment to direct microbe-human interactions. The laboratory introduces basic techniques of pure culture work, enrichments and isolation, and experimentation with microorganisms. Prerequisites: CHE 1101, CHE 1110, and CHE 1102, CHE 1120. Lecture three hours, laboratory three hours.

#### BIO 3310-MARINE SCIENCES

A study of the diverse marine habitats throughout the world and the organisms found within these habitats. Various aspects of the cellular, molecular, and developmental biology of marine organisms will be studied. The laboratory will examine selected marine invertebrates and vertebrates will include experimental manipulations. Lecture three hours, laboratory three hours. (WRITING)

#### BIO 3312-ENVIRONMENTAL STUDIES

GEN ED: Junior Writing in the Discipline (WID)

An in-depth study of environmental problems from a systems/ecological perspective, with emphasis on the scientific basis of the problems and solutions. Topics will vary by semester but will generally include population growth; mineral water and wildlife resources; energy resources; and waste and pollution. Involves significant written assignments. Lecture three hours. Prerequisites: BIO 1802 and ENG 2001 or its equivalent. (WRITING; SPEAKING)

#### BIO 3313-GLOBAL CHANGE ECOLOGY

GEN ED: Junior Writing in the Discipline (WID)

This course explores the causes and consequences of anthropogenic global change with a particular emphasis on key ecological processes. We will explore global changes in biogeochemistry, climate, biodiversity, and land cover. Students will use the scientific literature and laboratory experiences to better understand global environmental datasets and their interactions. Students will develop an understanding of the ecological underpinnings of global changes, and explore consequences as well as potential mitigation strategies.

Prerequisites: BIO 1802 and ENG 2001 or its equivalent. Lecture three hours, laboratory three hours. (WRITING)

#### BIO 3314-COMPAR VERTEBRATE ZOOLOG

GEN ED: Junior Writing in the Discipline (WID)

The origin, evolution, anatomy, physiology, taxonomy, and natural history of vertebrates. Lecture three hours, laboratory three hours.

Prerequisites: BIO 1801 and ENG 2001 or its equivalent. (WRITING)

#### BIO 3315-CONSERVATION BIOLOGY

GEN ED: Junior Writing in the Discipline (WID)

This course will introduce students to the foundations, key concepts, and current topics in Conservation Biology. Students will be exposed to different concepts of biodiversity, gain an appreciation of threats to biodiversity at scales ranging from local to global, and learn about the role of state and federal agencies, non-government organizations and other stakeholders in the struggle to preserve the natural resources of an increasingly populous earth. Prerequisites: BIO 1801, BIO 1802, and ENG 2001 or its equivalent.

Lecture three hours. (WRITING)

BIO 3320-AIR POLLUTION EF PLANTS PEOPLE

An in-depth study of the causes and consequences of air pollution throughout the world, including acidic deposition, particulates, visibility problems, and gaseous pollutants such as oxides of nitrogen and sulfur, fluorides, ozone, PAN, and carbon dioxide. The sources of these pollutants and their biological effects will be discussed, as well as their interactions with global climate change.

Lecture three hours; will include field trips to experimental sites. Prerequisites: BIO 1101 and BIO 1102, and junior level standing.

(WRITING; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

BIO 3800-MOLECULAR BIOLOGY

GEN ED: Junior Writing in the Discipline (WID)

A study of the basic molecular processes and critical recombinant DNA technologies. This includes: structure and general features of the biological information molecules DNA, RNA and proteins; DNA replication and repair processes; RNA synthesis and processing; protein synthesis and regulation; and basic recombinant DNA technology. The laboratory will include: DNA isolation techniques; restriction analysis; construction of a recombinant DNA molecule and cloning; DNA-DNA hybridization; in vitro translation and analysis of the protein; PCR amplification of DNA; DNA sequencing and analysis; and the introduction to computer analysis of DNA, RNA and proteins. Lecture three hours, laboratory three hours. Prerequisites: BIO 1801 and one semester of organic chemistry; and ENG 2001 or its equivalent. (WRITING; NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

BIO 4001-DEVELOPMENTAL BIOLOGY

BIO 4011-HONORS DEVELOPMNTL BIOL SEM

BIO 4513-PLANT MOLECULAR BIOLOGY

BIO 4518-HONORS RESEARCH

Initiation of a research project in the laboratory, field, or classroom under the supervision of a biology faculty member. At least one semester prior to the start of the research project, the student must formally confer with a thesis advisor and must also submit and have approved a formal research proposal. Prerequisite: admission to the Biology Honors Program.

#### BIO 4519-BIOLOGY HONORS THESIS

GEN ED: Capstone Experience

Work, under the supervision of a biology faculty member, on the project begun in BIO 4518 (Honors Research). An oral report on the project will be presented in a public seminar. A written thesis will be approved by a committee comprised, at minimum, of the thesis advisor and another faculty member. (Note: If a student is using the Biology Honors Thesis to fulfill the requirements for University Honors, one member of the committee must be from outside the Department of Biology.) A student who completes the thesis with a grade of "B" or higher will be eligible for "Honors in Biology." Prerequisite: BIO 4518 with a grade of "B" or higher.

#### BIO 4550-NATURE STUDY

Study of common plants and animals with emphasis on ecology, collecting techniques and identification. Designed for students with limited biology backgrounds. Not open to biology majors for credit. [Dual-listed with BIO 5505.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4551-ORNITHOLOGY

The morphology, physiology, behavior, ecology and identification of birds. Early morning field trips are required. Extended field trips to a variety of habitats will be arranged. Lecture and laboratory will emphasize techniques of observing, recording and analyzing data using a research project format. Lecture three hours, laboratory three hours. [Dual-listed with BIO 5551.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4552-ENTOMOLOGY

A study of the insects, including relevant anatomy for identification and physiology for function, with a special emphasis on the ecological roles of insects and their interaction with other organisms. Evolutionary relationships with related arthropods are also covered. Basic taxonomy of the major insect groups is addressed with a required insect collection, which teaches collecting and preservation techniques. Students are involved in basic experimentation that allows for investigating this very diverse animal group. Lecture three hours, laboratory three hours. [Dual listed with BIO 5552.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4555-PLANT PHYSIOLOGY

A study of the basic principles of plant physiology and fundamental processes such as cell properties, water relations, growth, photosynthesis, respiration, and mineral nutrition. Prerequisites: CHE 1101, CHE 1110 and CHE 1102, CHE 1120. CHE 2201 and CHE 2203 are strongly recommended. Lecture three hours, laboratory three hours. (WRITING; NUMERICAL DATA; COMPUTER)  
(ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)  
[Dual-listed with BIO 5555.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4556-MYCOLOGY

An investigation of the fungi with particular reference to the techniques of working with these organisms. Lecture three hours, laboratory three hours. [Dual-listed with BIO 5556.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4557-ICHTHYOLOGY

This course focuses on the ecology, evolution and diversity of fishes. Aspects of fish physiology and behavior will also be covered along with important conservation issues. In the laboratory, students will have the opportunity to learn how to identify major groups of fishes with emphasis on freshwater species. Lecture three hours, laboratory three hours. [Dual listed with BIO 5557.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4558-TAXONOMY OF FLESHY FUNGI

An in-depth study of the fleshy fungi (mushrooms [agarics], chanterelles, hydnums, polypores, and corals) with an emphasis on morphology, systematics, and ecology. Methods of collection, macroscopic and microscopic dissection, identification, and preservation are covered. Field trips are required. Lecture two hours, and laboratory three hours. [Dual-listed with BIO 5558.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4559-MAMMALOLOGY

The natural history, distribution, adaptations, taxonomy and economic importance of mammals. Field trips and visits to zoos will be arranged. Lecture three hours, laboratory three hours.

#### BIO 4560-HERPETOLOGY

The history, morphology, systematics, physiology, and distribution of amphibians and reptiles. Methods of collecting, storing, studying and identifying specimens as well as behavioral aspects of species in their natural habitats will be covered. Field trips will be required. Lecture three hours, laboratory three hours. [Dual-listed with BIO 5560.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4563-BIOLOGY OF AGING

General study of biological/physiological changes over time in the structure and function of the systems of organisms with emphasis on the human body. Lecture three hours. [Dual-listed with BIO 5563.] Dual-listed courses require senior standing; juniors may enroll

Biology The College of Arts and Sciences with permission of the department.

#### BIO 4564-MICROSCOPY

A study of the principles and techniques of biological microscopy. Lectures include discussions on preparative techniques for various types of bioimaging, the optical theories behind the imaging technologies, and the structure and function of cellular organelles.

Laboratories examine practical techniques of tissue preparation for various kinds of microscopy, the effective use of various types of microscopes, and the interpretation of data obtained from various imaging systems. Lecture three hours, laboratory three hours.

[Dual-listed with BIO 5564.] Dual-listed courses require senior standing; juniors may enroll with permission of the department

#### BIO 4567-LICHENOLOGY

A study of the morphology, diversity, evolution, ecology, physiology, and chemistry of lichens as well as their significance as biological

indicators. Field trips are required. Lecture two hours, and laboratory three hours. [Dual-listed with BIO 5567.] Dual-listed courses

require senior standing; juniors may enroll with permission of the department.

#### BIO 4568-IMMUNOLOGY

A study of the immune system with emphasis on cellular interactions involved in the generation of humoral and cell-mediated

immune responses. Lecture includes discussions on inflammation, antibody diversity, tissue transplantation, and immunopathologies.

Laboratories examine lymphoid tissue organization, lymphocyte function, and antibody-antigen reactions with emphasis on clinical

application. Prerequisite or corequisite: BIO 2400. Lecture three hours, laboratory three hours.

[Dual-listed with BIO 5568.] Duallisted

courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4569-INVERTEBRATE ZOOLOGY

Students will be introduced to the 34 extant major and minor invertebrate phyla which make up 99% of the Earth's named animal

species and virtually 100% of those animals yet undiscovered. The intriguing natural history, symmetry and development, mode of

locomotion, nutrition, reproduction, and primary environments of the invertebrates will be discussed. Labs will emphasize invertebrate

habitats, field collection, phylogenetic relationships as well as ecological and physiological adaptations and examination of major

morphological characteristics. Lecture three hours, laboratory three hours with required field trips. [Dual-listed with BIO 5569.]

Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4570-PARASITOLOGY

A survey of protistan, helminthic and arthropod parasites with emphasis on organisms of medical and veterinary importance. Lecture three hours, laboratory three hours. [Dual-listed with BIO 5570.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4571-PLANT-INSECT INTER TERR ECOS

A study of the associations between insects and plants, using lecture, class discussions and laboratory exercises. Lecture topics include constraints imposed by plants on herbivorous insects and the strategies insects use to overcome them, pollination biology and ecology and the interplay between biotic and abiotic factors in determining interactions. Laboratory exercises are field-based mini-experiments leading to the development of an individual project with experimentation and paper presentation. Lecture three hours, laboratory three hours. [Dual-listed with BIO 5571.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4572-VIROLOGY

The objective of this course is to introduce students to the principles of virology as related to the structure, biochemistry, replication, pathogenesis and control of viruses. There will be an emphasis on disease processes and the interaction of animal viruses. General topics include the chemical and physical properties of viruses, virus classification, cultivation and assay of viruses, pathogenesis, persistent infections, biotechnology, and viruses as a cause of neoplasia. The students' analytical and intuitive skills will be challenged by analyzing figures and data from journal articles in class discussions. Lecture three hours. Prerequisite: BIO 2600. [Dual-listed with BIO 5572.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4575-ECOTOXICOLOGY

#### GEN ED: Capstone Experience

This course introduces the various classes of toxicants, their fate within organisms and ecosystems, and the chemical transformations and mechanisms of toxicity. This course will also introduce students to standard lab and field toxicity tests, analysis of toxicity and quantification of toxins, data reduction and analysis, and the power of statistical analyses to identify significant effects. A case study approach will be utilized in lecture and labs to examine the toxic effects of heavy metals, organic compounds, insecticides, and environmental endocrine disrupters. Students will learn about important endpoints and bio-indicators of toxin exposure specific to each class of toxin and how they are used in ecological risk assessment. A service-learning component of the course will require students to conduct group toxicology projects with a local community partner. Lecture three hours, laboratory three hours with some required field trips. Prerequisites: Biology core courses (BIO 1801 and BIO 1802), one semester of organic chemistry, junior level writing in the discipline (WID) course, and senior standing. [Dual-listed with BIO 5575.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4601-ANIMAL BEHAV - ETHOL

Basic principles of animal behavior are approached from an evolutionary perspective. Topics such as instinct, learning, biological clocks, sociobiology, communication and physiological mechanisms of behavior are stressed. Laboratory emphasizes techniques of observing, recording, and analyzing behavior using a research project format. Lecture three hours, laboratory three hours. (WRITING; SPEAKING; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.) [Dual-listed with BIO 5601.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4700-SEMINAR IN BIOLOGICAL SCIENCE

##### GEN ED: Capstone Experience

A capstone experience in a seminar format. Students will be expected to read seminal articles, monographs, and books from the scientific literature, prepare synthesis papers drawing together ideas from several sources, and present their topics to the seminar group and participate in discussion. Prerequisites: senior standing, completion of a junior writing course, and permission of the instructor.

#### BIO 4900-INTERNSHIP

Practical biological experiences in federal, state, and local agencies. Graded on an S/U basis. [Dual-listed with BIO 5900.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### BIO 4910-CAPSTONE INTERNSHIP IN BIOLOGY

GEN ED: Capstone Experience

A capstone experience in a commercial/industrial setting, research laboratory, or research facility, or in a federal, state, or local government agency. Students will be expected to complete a significant project developed in conjunction with the cooperating outside facility or agency, will keep a daily journal of their internship experience, and will report the results of their internship in a public seminar. Prerequisites: senior standing, completion of a junior writing course, and permission of the instructor.

G S 3300-ED APPLIC OF SCIENCE CONCEPTS

This course is designed to address science concepts relevant to K-12 teachers in the realms of physical, biological, and earth sciences.

Pedagogy reflects styles used in K-12 classrooms: emphasis on inquiry, concept development, quantitative applications, and technology. Course content aligns with the North Carolina Standard Course of Study, the National Science Education Standards, and the Frameworks for 21st-Century Learning. Prerequisites: MAT 1010 or higher and at least sophomore standing.

G S 4401-SCI & SCI TCH IN ELEM SCHL

G S 4403-TCH SCI MIDDLE & HIGH SCHL

GEN ED: Junior Writing in the Discipline (WID)

This course is for the prospective middle/high school science teacher and it focuses on effective instructional strategies for teaching principles associated with major school science disciplines. Emphasis is placed on planning, science process skills, inquiry-based instruction, hands-on/minds-on activities, improvising materials, demonstrations, and assessment techniques. Special emphasis is also placed on the North Carolina Standard Course of Study and the National Science Education Standards. Secondary education majors will have at least 15 hours of teamed experience in public school classrooms as part of this course. It is STRONGLY ADVISED that all other requirements for licensure (except student teaching) be completed prior to this course. Lecture two hours, laboratory two hours. Prerequisite: ENG 2001 or its equivalent. (WRITING; SPEAKING; COMPUTER)

C S 3100-JUNIOR SEMINAR

GEN ED: Junior Writing in the Discipline (WID)

Students develop writing skills in the context of computer science including technical reports, software documentation, user manuals, correspondence, and writing for the web. Ethical, legal, social, historical, and global issues provide a context for the assignments.

Prerequisite: ENG 2001 or its equivalent. (WRITING)

C S 4100-SENIOR SEMINAR



A broad, systematic coverage of current ethical issues facing computer scientists. Current and historical cases from both local and global perspectives are examined. Professional development activities are required including mock interviews and resume writing.

Prerequisites: CS 3100 and senior standing in computer science or permission of the instructor. (WRITING; SPEAKING)

#### GLS 2000-CONTEMPORARY GLOBAL ISSUES

GEN ED: Local to Global Perspective (Themes: "Empire, Colonialism, and Globalization" and "Origins and Migrations")

This course examines a selection of global issues from a variety of perspectives and disciplines. Students will be exposed to the complexities of these issues, which are the result of the confluence of historical, geographical, economic, cultural, and political factors.

Emphasis will be placed on how different societies view global issues, as well as how different perspectives can alter one's understanding of them. (MULTI-CULTURAL; CROSS-DISCIPLINARY)

#### GLS 2350-INTRODUCTION TO PEACE STUDIES

In this course, students will explore relevant theories about peace studies, as well as a history of the development of the area of peace studies. The course will ask students to discuss the problems that arise when working in the area of peace and evaluate the ways in which states and individuals consider waging peace. Finally, the course will encourage students to consider their contributions toward achieving a world in which people can resolve conflicts more effectively. Given the ultimate goal of understanding ideas such as negative peace and positive peace and nonviolent methods for conflict resolution, this course will be very interdisciplinary, including but not limited to academic fields in political science, sociology, psychology, economics, gender studies, anthropology, and literary studies. Working across fields and supporting an open discourse allows for multiple interpretations and perspectives. (Same as IDS 2350.)

#### GLS 4000-SEMINAR IN GLOBAL STUDIES

GEN ED: Junior Writing in the Discipline (WID)

Students will engage in an intensive investigation of one or more global questions, themes, or issues in global studies. The class is organized as a seminar. Emphasis is placed on critical reading, research, writing, and speaking. The topic of this course will vary from semester to semester. Barring duplication of content, a student may repeat the course. The communication proficiency in Global

Studies is met by earning a grade of "C" or higher in this course. Prerequisite: ENG 2001 or its equivalent. (WRITING; SPEAKING; MULTI-CULTURAL)

#### GLS 4515-SENIOR HONORS THESIS

Independent study and research. Honors thesis directed by a member of the Interdisciplinary Studies Program faculty and graded

by a committee appropriate for the topic. Oral presentation. Corequisite: IDS 4550. (WRITING)

#### IDS 2000-GND EXP:INTRO AMER STUDIES

GEN ED: Historical and Social Perspective (Theme: "This American Life")

Since the 1930s, scholars have been studying the core values and ideas that define American (U.S.) culture. American Studies

scholars integrate ideas and methods from a diverse array of disciplines in examining what it is that makes this place and its people

"American." In this course, students will review the roots of American Studies and the concepts of exceptionalism, multiculturalism, and transnationalism, which have characterized how U.S. culture is perceived both here and abroad. Embedded in these concepts are physical, economic, political, and demographic characteristics that have historically defined and continue to define "America."

IDS 2200-RACE AND RESISTANCE

GEN ED: Historical Studies Designation; Historical and Social Perspective (Theme: "Revolutions and Social Change")

Race remains one of America's central organizing principles. This course will explore how African Americans in the South, following

the Civil War, struggled against white supremacy in their politics and in their culture, in the process creating perhaps our nation's

most successful non-violent campaign for social change, the Civil Rights Movement. To do this, we will explore the African American

experience from a variety of disciplinary perspectives: scholars from different disciplines, students will come to understand, can

approach the past very differently. Students will also become acquainted with popular aspects of African American culture, such as

jazz, blues, dance, religion and food. During the course of the semester, students will design their own research projects, integrating

knowledge drawn from a variety of disciplinary approaches and methods, presenting their research in both written form and other

media.

IDS 2210-BODIES PLACE SPACE TIME THING

GEN ED: Aesthetic Perspective (Theme: "The Body: Expression, Presentation, and Representation")

Inquiring into the ways in which humans create, transmit and transform meaning materially, this course investigates the physical

dimensions of human being - bodies (our own and others'), places, spaces, times, and things - exploring how dimensions of physical

existence common to the human species bear variable meanings across personal and cultural boundaries. (WRITING; MULTICULTURAL;

CROSS-DISCIPLINARY) (CORE: HUMANITIES or SOCIAL SCIENCES)

IDS 2350-INTRODUCTION TO PEACE STUDIES

In this course, students will explore relevant theories about peace studies, as well as a history of the development of the area of peace studies. The course will ask students to discuss the problems that arise when working in the area of peace and evaluate the ways in which states and individuals consider waging peace. Finally, the course will encourage students to consider their contributions toward achieving a world in which people can resolve conflicts more effectively. Given the ultimate goal of understanding ideas such as negative peace and positive peace and nonviolent methods for conflict resolution, this course will be very interdisciplinary, including but not limited to academic fields in political science, sociology, psychology, economics, gender studies, anthropology, and literary studies. Working across fields and supporting an open discourse allows for multiple interpretations and perspectives. (Same as IDS 2350.)

IDS 2410-INTRO APPAL STU, HUMANITIES

IDS 2411-INTRO APPALACHIAN ST, SS

IDS 2420-INTRO WOMEN STU, HUMANIT

IDS 2421-INTRO WOMEN STU, SOC SCI

IDS 2430-INTRO LATIN AMER STUDIES

IDS 2440-INTRO TO SUSTAINABLE DEVEL

IDS 2450-INTRO NOT-FOR-PROFIT ORGANIZAT

This course explores many facets of nonprofit organizations including organizational structure, laws, and regulations in nonprofit, employment and working conditions, entry methods into nonprofit careers, and segments of the nonprofit world of work. This course also explores the guiding principles, philosophy and mission of nonprofit organizations from an interdisciplinary approach, studying them from a societal, historical, political, legislative, and economic point of view. (CROSS-DISCIPLINARY)

IDS 2460-SAVANNAH, GEORGIA

This course, which involves travel to Savannah over Fall Break, will introduce students to the history, architecture, religious/spiritual heritage, folklore (based in art, music, cuisine, folk culture), and some community organization efforts of Savannah, Georgia. Students will have the opportunity to engage in reading and discussion prior to the Fall Break trip during which they will begin to develop projects that apply their reading to their experience. (SPEAKING; CROSS-DISCIPLINARY)

IDS 3010-H2O: WE ARE WATER

GEN ED: Local to Global Perspective (Theme: "Global Resources")

Water is studied in disciplines ranging from art to zoology. The hydrologic cycle functions on a global scale but has local impacts.

This interdisciplinary course will look at water policy and how we manage water resources; who gets water, for what purpose; and the impacts of these decisions on the resource. It will discuss the ways we use water, abuse it, revere it, ignore it, and fight over it. In the US, our quality of life is entirely dependent on cheap, plentiful, clean water. We use it in vast quantities to produce power, grow food, and protect our health. Globally, demands for water continue to increase. The class will cover the intersections among our scientific understanding of water flows, our technological developments, and our policy approaches toward this elemental resource, locally and globally.

IDS 3250-INTERNET STUDIES

This seminar explores the emerging interdisciplinary field of Internet Studies. Topics covered may include the digital divide, virtual communities, race and gender in cyberspace, and topics in cyberculture. These and other issues may be explored for their social, political, psychological, economic, cultural, ethical, and artistic implications. This seminar will also help students develop their critical reading and writing skills in connection with the World Wide Web, explore Internet research methodologies, and introduce students to some of the technical and editorial issues involved in Web page design and publication. This course is required for the concentration in Internet Studies under the B.A. degree in Interdisciplinary Studies; and it is also a required course for the undergraduate minor in Internet Studies. There are no prerequisites. (WRITING; CROSS-DISCIPLINARY; COMPUTER)

IDS 3251-PRINC OF AGROECOLOGY

IDS 3260-CREATIVITY: AN INTRODUCTION

GEN ED: Historical and Social Perspective (Theme: "Mind")

An interdisciplinary and cross-cultural investigation of creativity as an individual, social, cultural, and natural phenomenon. Although often associated with artistry, creativity contributes to the development of all academic and professional disciplines and is an important component in non-academic culture and in individual life. The concept of creativity has deep roots in Western culture (going back at least to Augustine), and the cross-disciplinary study of creativity has burgeoned in the United States since WWII. The class will explore: the history of the concept of creativity; creativity and self-fulfillment; psychological, anthropological, and sociological theories of creativity; practices claiming to enhance creativity; and case studies of creative individuals and creative breakthroughs.

IDS 3261-SUSTAINAB RELIGION SPIRITUAL

GEN ED: Historical and Social Perspective (Theme: "Religion, Myth, and Society")  
Debate has raged among scholars, activists, and members of religious communities about the role(s) of religion and of specific religions in fostering unsustainability and in achieving sustainability. As part of this debate, some have proposed the existence and importance of a spirituality unconnected with historical or new religions as a key component of moving toward sustainability. This course provides an interdisciplinary introduction to these questions both in their historical and contemporary forms.

IDS 3650-MARX'S CAPITAL

This course provides an introduction to Karl Marx as well as an in-depth study of his major theoretical work, *Capital*, Volume I.

The transdisciplinary uses of Marxian theory in illuminating a wide variety of issues across disciplinary boundaries will be explored.

Students will be asked to make connections between Marx's writings and their own areas of study. (WRITING; CROSS-DISCIPLINARY)

IDS 4251-AGROECOLOGY PRAC, SYS & PHIL

IDS 4650-WOMEN: OFFENDERS,VICTIMS

IDS 5100-FDN OF SUSTAINABLE DEVELM'T

IDS 5251-AGROECOLOGY PRAC, SYS & PHIL

IDS 5300-ISSUES IN GLOBAL SYS SCIENCE

CHE 1101-INTROD CHEMISTRY I

GEN ED: Science Inquiry Perspective (Theme: "Chemistry: Connections to Our Changing World")

A study of the fundamental principles of chemistry emphasizing modern atomic theory, the structure and behavior of atoms, the properties and states of matter, energy relations, periodicity and mole concepts. Lecture three hours. Corequisite or prerequisite:

CHE 1110. (NUMERICAL DATA) (CORE: NATURAL SCIENCES) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

CHE 1102-INTROD CHEMISTRY II

GEN ED: Science Inquiry Perspective (Theme: "Chemistry: Connections to Our Changing World")

A study of properties of solutions, acid-base concepts, equilibria, elementary thermodynamics, elementary kinetics, electrochemistry.

Lecture three hours. Prerequisites: CHE 1101 and CHE 1110; corequisite or prerequisite: CHE 1120. (NUMERICAL DATA) (CORE: NATURAL SCIENCES) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

CHE 1110-INTROD CHEMISTRY LAB I

GEN ED: Science Inquiry Perspective (Theme: "Chemistry: Connections to Our Changing World")

Laboratory experiments to supplement the study of the topics listed under CHE 1101.

Laboratory three hours. Corequisite or

Chemistry The College of Arts and Sciences

prerequisite: CHE 1101. (CORE: NATURAL SCIENCES)

CHE 1120-INTROD CHEMISTRY LAB II

GEN ED: Science Inquiry Perspective (Theme: "Chemistry: Connections to Our Changing World")

Laboratory experiments to supplement the study of the topics listed under CHE 1102.

Laboratory three hours. Corequisite or

prerequisite: CHE 1102. (CORE: NATURAL SCIENCES)

CHE 2000-SOPHOMORE RESEARCH

Independent research under the direct supervision of a faculty member. Three hours per week of laboratory work, regular progress reports, and a final written report are required. Prerequisite: CHE 1120 or permission of the instructor.

CHE 2101-FUND OF ORGANIC CHEMISTRY

A study of the fundamental concepts and basic physical and chemical properties of the major classes of the compounds of carbon.

Emphasis is placed upon the importance of these groups in living systems and in everyday life.

Lecture three hours. Prerequisites:

CHE 1102 and CHE 1120; corequisite or prerequisite: CHE 2102. This course is not an appropriate prerequisite for CHE 2202.

CHE 2102-FUND OF ORGANIC CHEM LAB

Introduction to basic laboratory practice in the synthesis, identification, and purification of organic compounds utilizing common organic

laboratory techniques. Laboratory three hours/half semester. Prerequisites: CHE 1102 and CHE 1120; corequisite or prerequisite:

CHE 2101.

CHE 2201-ORGANIC CHEMISTRY I

First course of a two-semester sequence in organic chemistry. An in-depth study of structure, bonding, properties and stereochemistry

of carbon compounds. Introduction to classes of organic compounds and their nomenclature, reaction mechanisms and organic synthesis

will also be introduced. Lecture three hours. Prerequisites: CHE 1102 and CHE 1120;

prerequisite or corequisite: CHE 2203.

CHE 2202-ORGANIC CHEMISTRY II

Second course of a two-semester sequence in organic chemistry. Continuing coverage of the classes of organic compounds. Detailed

coverage of spectroscopy, carbonyl compounds (aldehydes, ketones, carboxylic acids and derivatives), and amines. Amino acids,

carbohydrates and proteins will also be introduced. Reaction mechanisms, organic synthesis and spectroscopy will be emphasized.

Lecture three hours. Prerequisites: CHE 2201 and CHE 2203 (with a minimum grade of "C-" in each). Corequisite or prerequisite:

CHE 2204.

CHE 2203-ORGANIC CHEMISTRY LAB I

Laboratory practice in the synthesis of organic compounds and the use of common laboratory techniques. Laboratory three hours.

Prerequisites: CHE 1102 and CHE 1120; corequisite or prerequisite: CHE 2201 or written permission from the department chair.

#### CHE 2204-ORGANIC CHEMISTRY LAB II

Laboratory practice in synthesis, separations, practical spectroscopy, and determination of unknowns. Laboratory three hours.

Prerequisites: CHE 2201 and CHE 2203 (with a minimum grade of "C-" in each). Corequisite or prerequisite: CHE 2202.

(WRITING)

#### CHE 2400-INTRO TO FORENSIC CHEM CRIMNL

Introduction to forensic chemistry, including utilization of physical evidence in law enforcement, processing a crime scene, the

application of chemistry techniques in the identification and analysis of physical evidence

(drugs, blood, fire residues, glass, soil, ink,

etc.), forensic toxicology, forensic microscopy, and forensic aspects of arson. Techniques such as chromatography, ultraviolet-visible

and infrared spectroscopy, refractive index measurements, breath-analyzers, DNA

fingerprinting, and blood-typing will be discussed.

Prerequisites: CHE 1102 and CHE 1120. (CROSS-DISCIPLINARY)

#### CHE 2525-TA IN INTRODUCTORY CHEMISTRY

A supervised experience in the instructional process at the post-secondary school level through direct participation in a laboratory

setting. Graded on an S/U basis. Prerequisites: CHE 1101, CHE 1110, CHE 1102, and CHE 1120.

May be repeated for a total credit

of two semester hours.

#### CHE 2550-INTRO TO ENVIRONMENTAL CHEMISTRY

An introduction to environmental issues as seen through a chemical perspective. A broad survey of the biosphere, hydrosphere,

lithosphere, atmosphere, and energy will be conducted. Specific topics include toxic organic compounds, pesticides, environmental

endocrine disruptors, metal pollution, natural water chemistry, water pollution and purification, soil chemistry, soil contamination

and remediation, the ozone hole, smog, global warming, alternative fuels, and renewable

energy. Lecture three hours. Prerequisites:

CHE 1102 and CHE 1120. (CROSS-DISCIPLINARY)

#### CHE 3000-INTRO TO CHEM RESEARCH

An introduction to the techniques and methodology of chemical research. Topics include survey of the chemical literature; information

retrieval services; making effective oral presentations, and ethics and safety in the chemical laboratory. This course requires formal

speaking. Prerequisites: CHE 2101 or CHE 2202 and CHE 2210. (SPEAKING)

#### CHE 3301-PHYSICAL CHEMISTRY I

Physical Chemistry is built upon four major theoretical principles: thermodynamics, kinetics, quantum mechanics, and statistical

mechanics. Physical Chemistry I covers an introduction to thermodynamics and kinetics. Lecture three hours. Prerequisites: CHE

2210, CHE 2211, MAT 1120, PHY 1150, and PHY 1151. (COMPUTER)

#### CHE 3302-PHYSICAL CHEMISTRY II

Physical Chemistry is built upon four major theoretical principles: thermodynamics, kinetics, quantum mechanics, and statistical mechanics. Physical Chemistry II covers an introduction to quantum mechanics and statistical mechanics. Lecture three hours.

Prerequisite: CHE 3301. (COMPUTER)

CHE 3303-PHYSICAL CHEMISTRY I LAB

GEN ED: Junior Writing in the Discipline (WID)

Experimental investigations which supplement the study of the topics in Physical Chemistry I.

Applications of computer techniques

for data reduction and manipulation will be introduced and utilized. Laboratory three hours.

Prerequisites: CHE 2210, CHE 2211, MAT

1120, PHY 1150, PHY 1151, and ENG 2001 or its equivalent. Corequisite or prerequisite: CHE 3301. (WRITING)

CHE 3304-PHYSICAL CHEMISTRY II LAB

Experimental investigations which supplement the study of the topics in Physical Chemistry II.

Applications of computer techniques

for data reduction and manipulation will be introduced and utilized. Laboratory three hours.

Prerequisite: CHE 3303. Corequisite or

prerequisite: CHE 3302. (WRITING)

CHE 3400-JUNIOR RESEARCH

Independent research under the direct supervision of a faculty member. Three hours per week of laboratory work, regular progress

reports, and a final written report are required. Prerequisite: CHE 2000 or permission of the instructor.

CHE 3404-INORGANIC CHEMISTRY

The fundamentals of atomic theory and valence bond, ligand field and molecular orbital theories for interpretation of chemical bonding

are considered in detail. Applications of these theories to the magnetic and spectral properties, structure, stability, and reaction

mechanisms of inorganic compounds are examined, with emphasis on the transition metals.

Symmetry and group theory are used

to describe the fundamentals of X-ray crystallography. The role of metal atoms in

organometallic and bioinorganic molecular systems

is considered. Prerequisite: CHE 3301. Lecture three hours.

CHE 3405-INORGANIC CHEMISTRY LAB

Experimental investigations which supplement the study of inorganic chemistry, involving reactions in inert atmospheres, vacuum

systems and hot tubes. Corequisite or prerequisite: CHE 3404. Laboratory three hours.

CHE 3521-SECONDARY SCIENCE FLD EXP

A supervised experience in the instructional process at the secondary school level through direct participation in a classroom situation.

Graded on an S/U basis. Prerequisite: junior or senior standing. May be repeated for a total credit of three semester hours. Required

of all teacher-licensure candidates in chemistry.

CHE 4000-CHEMISTRY SEMINAR



CHE 4000. Chemistry Seminar (1).F;S.

GEN ED: Capstone Experience

A senior capstone experience on the presentation and discussion of current chemical topics.

Oral and written reports are required.

Prerequisites: CHE 3000 and CHE 3303. (SPEAKING)

CHE 4200-BREWING SCIENCE & ANALYSIS

This course will provide a rigorous coverage of the chemical and physical processes that go into brewing malted beverages, including coverage of the hops, malt, and yeast varieties and how they are combined to produce specific styles and flavors of beers. Flavor

and aroma compounds will be quantified by students using appropriate instrumental techniques.

Lecture three hours, laboratory

three hours. Prerequisites: CHE 2210 and CHE 2211. (Same as FER 4200.)

CHE 4400-SENIOR RESEARCH

A laboratory research project under the supervision of a faculty member. An oral report of the work in progress will be made at the

regular seminar and a written report of the results is to be submitted to the chemistry faculty upon completion. May be completed

abroad at a university with which Appalachian has an articulation agreement with approval of the department chair. Laboratory four

hours (minimum). Prerequisite: CHE 4000 or permission of the instructor. May be repeated once for credit. (SPEAKING)

CHE 4510-CHEMISTRY HONORS THESIS

Independent study and research for an honors thesis directed by a faculty member of the A.R. Smith Department of Chemistry.

Prerequisite: completion of three honors credit hours in chemistry and a minimum grade point average of 3.45 overall and in chemistry.

Prerequisite or corequisite: CHE 4000 with honors. All honors students must earn a minimum of two credits of CHE 4510; these

hours must take place in two different semesters with one credit each semester. To complete the honors thesis requirements, a

written thesis must be submitted to and approved by the thesis committee.

CHE 4580-BIOCHEMISTRY I

This course covers the properties of amino acids, proteins, carbohydrates, lipids and nucleic acids and presents a brief introduction

to enzymology. Major emphasis is on the chemistry of biological compounds. An introduction to intermediary metabolism is also

presented. Prerequisite: CHE 2101 or CHE 2202. Lecture three hours. [Dual-listed with CHE 5580.] Dual-listed courses require senior

standing; juniors may enroll with permission of the department.

CHE 4581-BIOCHEMISTRY I LAB

Experimental investigations which supplement the study of the topics in biochemistry.

Prerequisite: CHE 2203 (or equivalent); co- or

prerequisite: CHE 4580 or CHE 5580 (or equivalent). Laboratory three hours. (WRITING) [Dual-listed with CHE 5581.] Dual-listed

courses require senior standing; juniors may enroll with permission of the department.

CHE 4582-BIOCHEMISTRY II

This course will cover the intermediary metabolism of amino acids, nucleic acids, carbohydrates and lipids. Metabolic pathways and their associated enzymes are emphasized. Prerequisite: CHE 4580 with CHE 3301 recommended but not required. Lecture three hours. [Dual-listed with CHE 5582.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### CHE 4600-SELECTED TOPICS

On Demand.

An opportunity to study a special topic or combination of topics not otherwise provided for in the chemistry curriculum. May be repeated for credit when content does not duplicate. Prerequisite: upper-division status or departmental permission.

#### CHE 4610-HISTORY OF CHEMISTRY

A study of the development of chemistry as a science with emphasis on the development of basic concepts, ideas and theories.

Prerequisite: a year of introductory chemistry. Lecture three hours.

#### CHE 4620-ENVIRONMENTAL CHEMISTRY

GEN ED: Capstone Experience

A capstone course for students pursuing a concentration in Environmental Chemistry, this course will focus the wide diversity of subject matter required by this major. The course will involve discussions and applications of air, water and soil chemistry while giving the student an appreciation of the scientific, legal, political and economic issues inherent in Environmental Chemistry. Prerequisites:

CHE 3301, CHE 3560, CHE 3561 STT 2810. Lecture three hours, laboratory three hours.

#### CHE 4630-FORENSIC TOXICOLOGY

This course provides an introduction to forensic toxicology. Topics include the history of toxicology, basic classification of illicit drugs, pharmacokinetics, pharmacodynamics, the isolation and analyses of these drugs in a forensic setting, and specific analyte categories.

Lecture three hours. Prerequisite: CHE 2101 or CHE 2202.

#### CHE 4640-ANALYTICAL METHODS FORENSIC CHEM

This course provides an in-depth discussion of forensic analysis. Topics include analytical tools, statistical analysis, principles of separations and spectroscopy, and the analysis of drugs, arson samples, explosives, paints, and fibers. The course will expand upon CHE 3560 (Instrumental Methods of Analysis) in that the basics learned in that course will be used specifically for forensic analysis.

Lecture three hours, laboratory three hours. Prerequisites: CHE 3560 and CHE 3561.

#### CHE 4900-INTERNSHIP IN CHEMISTRY

GEN ED: Capstone Experience

Independent, supervised work in applied chemistry at an approved industrial, quality control, analysis, or production facility.

Appropriate entities include, but are not limited to, commercial businesses and governmental agencies. May be taken for a maximum

of 12 semester hours, with a maximum of 6 semester hours credit per summer session. Only three of those hours will count toward

major requirements. Prerequisite: CHE 3303. Graded on an S/U basis.

ENG 2120-AFRICAN-AMERICAN LITERATURE

GEN ED: Literary Studies Designation; Historical and Social Perspective (Theme: "Individual and Society")

A critical study of the work of outstanding African-American writers. (WRITING; MULTI-CULTURAL) (CORE:HUMANITIES/LITERATURE)

ENG 2130-ETHNIC AMERICAN LIT

GEN ED: Literary Studies Designation; Local to Global Perspective (Theme: "Democracy and Personal Life")

A study of major ethnic American literature, with a particular focus on Latino American, Asian American, and/or American Indian writers. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

ENG 3174-TOPICS IN GLOBAL CINEMA

ENG 3240-WORLD LIT FOR CHILDREN

Students will read and analyze translations and other children's books in English from countries around the world. Literary analysis of the books will form the basis for comparing and contrasting cultures, historical periods, and differing national worldviews of childhood.

Other issues such as racism and sexism will also be examined. (Same as RE 3240.) (WRITING; MULTI-CULTURAL)

ENG 3710-STUDIES IN WOMEN & LIT

A study of the work of outstanding women writers; course content may vary and may concentrate on poetry, fiction, drama, or nonfiction prose, and associated criticism and theory. (WRITING; MULTI-CULTURAL)

ENG 4280-LITERARY & CULTUR STUDY ABROAD

A study of the work of outstanding women writers; course content may vary and may concentrate on poetry, fiction, drama, or nonfiction prose, and associated criticism and theory. (WRITING; MULTI-CULTURAL)

ENG 4570-STUDIES IN AMER INDIAN LIT

A study of major American Indian writers from oral traditions through the present. (WRITING; MULTI-CULTURAL) [Dual-listed with ENG 5570.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

ENG 4571-CAPSTONE AMERICAN INDIAN LIT

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on American Indian literature and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English. Prerequisites: ENG 3000, senior standing, and permission of the instructor.

ENG 4580-STUDIES IN AFR-AMER LIT

A close examination of major African/American writers, with emphasis on twentieth century novelists and poets.

ENG 4581-CAPSTONE AFRICAN-AMERICAN LIT

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on African-American literature and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English. Prerequisites: ENG 3000, senior standing, and permission of the instructor.

ENG 4585-STUDIES IN ETHNIC AMER LIT

Alternate years.

An in-depth and multi-cultural examination of major ethnic American writers. (WRITING;MULTI-CULTURAL) [Dual-listed with ENG 5585.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

ENG 4586-CAPSTONE ETHNIC AMERICAN LIT

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on Ethnic American literature and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English. Prerequisites: ENG 3000, senior standing, and permission of the instructor.

ENG 4590-WORLD LITERATURE

A study of literary content, theories, and problems of a specific world-epoch.

ENG 4592-CAPSTONE IN WORLD LITERATURE

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on World literature and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English. Prerequisites:

ENG 3000, senior standing, and permission of the instructor.

ENG 4710-ADV STUDIES WOMEN & LIT

An examination of the work of a particular woman writer, a select group of related women writers, or a specific topic or genre.

ENG 4711-CAPSTONE WOMEN & LITERATURE

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on the representation of women in literature and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English. Prerequisites: ENG 3000, senior standing, and permission of the instructor.

ENG 4720-APPALACHIAN LITERATURE

A study of major regional movements, genres, writers in the Appalachian mountains, from settlement to the present. Content and approach may vary. [Dual-listed with ENG 5720.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

ENG 4721-CAPSTONE IN APPALACHIAN LIT

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on Appalachian literature and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English.

Prerequisites: ENG 3000, senior standing, and permission of the instructor.

ENG 4810-ADVANCED FOLKLORE

An in-depth and multi-cultural study of one or more folklore genres in cultural context with interdisciplinary approaches from the humanities and social sciences. It is recommended that ENG 3050, Studies in Folklore, be taken prior to this course. (MULTI-CULTURAL; CROSS-DISCIPLINARY) [Dual-listed with ENG 5710.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

ENG 4811-CAPSTONE IN FOLKLORE

GEN ED: Capstone Experience

A senior capstone experience in the presentation and discussion of current topics in literary study, focused on folklore and culminating in an independent research project. Fulfills the capstone requirement for the Bachelor of Arts degree in English. Prerequisites:

ENG 3000, senior standing, and permission of the instructor.

FER 1000-PRINCIP OF FERMENT SCIENCE

Principles of fermentation sciences will cover the history, culture, and fundamental science of the fermentation processes, basic food science, microbiology, chemistry, biology, natural products chemistry and nutrition. FER 1000 will introduce concepts relating to the cultivation of grapes, grains and hops utilized in the fermentation industry. Students will be exposed to the basic methods and principles behind the fermentation process including production of cheese, bread, vegetables, meats, beer, wine, bio-fuels and distilled products.

FER 2000-SOC IMPLIC OF FERM BEVS

This seminar will provide an overview and discussions around the historical, cultural, social, moral, ethical and legal aspects of alcohol production and consumption as well as metabolism and human physiology. This includes discussion of ideas such as alcohol consumption in the context of various theological and cultural principles and beliefs. Other exercises, such as debating the merit of alcohol production from food-crops, will provide students with an opportunity to exchange ideas and engage in scholarly debate through verbal and written communication. Lectures and discussion will be lead by invited faculty and staff within their field of expertise (e.g., philosophy and religion, sociology, toxicology, biology).

FER 3000-VITICULTURE

Viticulture will focus on the taxonomy, morphology, and cultivation installation and maintenance as well as vine physiology, pest and disease management, water relations and general quality/yield parameters. Discussions will highlight differences based on geographic locations and vine-climate interactions. Students will also gain hands-on experience with vine management and cultivation through visits and collaboration with local vineyards. Prerequisite: BIO 1801. (CROSS-DISCIPLINARY)  
FER 3200-FACILITY DESIGN AND OPERATION

This course will provide students with knowledge relevant to the design and operation of standard production facilities. Scientific principles will include fluid and mass transfer and thermodynamics. Students will gain experience interpreting systems and process identification diagrams and equipment design, layout and flow-through. This course will be project-based, where students are required to research and design an appropriate facility including handling of raw materials, waste streams, fermentation, distillation and packaging including cost analysis. Projects will be undertaken in teams and require professional written/oral documentation and presentation.

#### FER 4100-WINE PRODUCTION & ANALYSIS

Wine production and analysis will lead students through the processing of grapes from the vine to the bottle. Lectures will provide an overview of the winemaking process and the scientific principles associated with each step including microbiology, biochemistry, chemistry, and standard equipment and instrumentation used in the process. The fundamental aspects of berry composition, fermentation kinetics, sanitation, aging and bottling will be discussed. Students will have hands-on experience with micro-scale fermentations and standard laboratory analysis of fruit, must and finished wines. Field trips will include visits to local vineyards and wineries to provide relevant exposure to facilities and the winemaking process. Lecture three hours, laboratory three hours. Prerequisites: CHE 2210 and CHE 2211. (WRITING; CROSS-DISCIPLINARY; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### FER 4200-BREWING SCIENCE & ANALYSIS

This course will provide a rigorous coverage of the chemical and physical processes that go into brewing malted beverages, including coverage of the hops, malt, and yeast varieties and how they are combined to produce specific styles and flavors of beers. Flavor and aroma compounds will be quantified by students using appropriate instrumental techniques. Lecture three hours, laboratory three hours. Prerequisites: CHE 2210 and CHE 2211. (Same as CHE 4200.)

#### CHN 1040-INTERMEDIATE CHINESE I

Focus on various aspects of culture, society, literature, traditions, and daily preoccupations through continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: CHN 1020 or consent of the instructor. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

#### CHN 1050-INTERMEDIATE CHINESE II

GEN ED: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

A continuation of CHN 1040. Focus on various aspects of culture, society, literature, traditions, and daily preoccupations with continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: CHN 1040 or the equivalent. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

#### CHN 2001-ADVANCED CHINESE I

Focuses on acquiring additional proficiency in speaking, listening, reading and writing.

Prerequisite: CHN 1050 or its equivalent.

Laboratory work required.

#### CHN 2003-ADVANCED CHINESE II

Focuses on acquiring proficiency in speaking, listening, reading and writing. Prerequisite: CHN 2001 or its equivalent. Laboratory work required.

#### CHN 2005-INTENSIVE GRAMMAR REVIEW

Focus is on the practice of various aspects of basic Chinese grammar patterns and language structures. Prerequisite: CHN 2003 or its equivalent. Laboratory work required.

#### CHN 2010-CONVERSATIONAL CHINESE I

This course is designed for those with intermediate language proficiency who wish to focus on oral language skills. Prerequisite: CHN 1050 or its equivalent. Laboratory work required.

#### CHN 2020-CONVERSATIONAL CHINESE II

This course is designed for those with intermediate language proficiency who wish to focus on oral language skills. Prerequisite: CHN 2010 or permission of the instructor. Laboratory work required.

#### CHN 3090-BUSINESS CHINESE

Focuses on oral and written business expressions common in business communications.

Prerequisite: CHN 2003 or its equivalent.

Laboratory work required.

#### FRE 1030-ACCELERATED BEGIN FRENCH

Combines FRE 1010 and FRE 1020. Open to students with no previous experience in French or whose French placement score indicates deficiency. Meets daily for a total of 300 minutes per week. Laboratory work required.

#### FRE 1040-INTERMEDIATE FRENCH I

Focus on various aspects of culture, society, literature, traditions, and daily preoccupations through continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: adequate score on the placement test or FRE 1020, or FRE 1030, or the equivalent. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

#### FRE 1060-ACCELERATED INTERM FRE

GEN ED\*: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

Combines FRE 1040 and FRE 1050. Prerequisite: FRE 1020 or the equivalent. Class meets daily for a total of 300 minutes per week.

Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES) (\*NOTE: Only 3 s.h. of this 6 s.h. course may count for general education credit in a theme.)

IN ORDER TO REGISTER FOR COURSES TAUGHT IN FRENCH ON THE 2000 LEVEL OR ABOVE, STUDENTS MUST COMPLETE FRE 1050

OR FRE 1060 OR MAKE AN ADEQUATE SCORE ON THE PLACEMENT TEST.

#### FRE 2010-SPOKEN FRENCH

Study of French sounds, vocabulary, and structures targeting listening comprehension and oral self-expression in French. Practice

aimed at improving pronunciation, idiomatic usage, discursive and presentational modes of the language. Prerequisite: FRE 1050 or

FRE 1060 or consent of the instructor. Laboratory work required. Required for minors and majors. (SPEAKING)

#### FRE 2035-THE FRENCH SPEAKING WORLD

Initiation to French-speaking cultures of the world, including Europe, West and Central Africa, Quebec, and the Antilles. Continued

practice of language skills through various readings, discussions, presentations, and written assignments in French. Prerequisite:

FRE 2005 or consent of the instructor. Required for majors.

#### FRE 2055-WOMEN WRITERS FRENCH EXPRESSION

This course will focus on select literary texts by women writers of the French-speaking world, including francophone Europe, Africa,

the Antilles, and the Americas. Continued development of students' French language skills through readings, written assignments,

and class discussions. This course satisfies the 2000-level major requirement in French literature. The course content may vary, but

FRE 2055 may count only once in fulfillment of major or minor program requirements in French.

Prerequisite: FRE 2005. (WRITING;

MULTI-CULTURAL)

#### FRE 2065-BLACK WRITERS FRENCH EXPRESSION



This course will focus on select literary texts by black writers of the French-speaking world, including francophone Europe, Africa, and the Antilles. Continued development of students' French language skills through readings, written assignments, and class discussions.

This course satisfies the 2000-level major requirement in French literature. The course content may vary, but FRE 2065 may count only once in fulfillment of major or minor program requirements in French. Prerequisite: FRE 2005. (WRITING; MULTI-CULTURAL)

FRE 3030-MASTERWORKS OF FRENCH LIT

Alternate years.

A study of selected works of French literature from the Medieval to the Modern period.

Prerequisite: one 2000-level FRE literature course (FRE 2025, FRE 2045, FRE 2055, or FRE 2065) or consent of the instructor. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

FRE 3035-LITERATURE AND FILM

Alternate years.

This course will focus on select literary texts of French expression and cinematographic adaptations of them. This course satisfies the 3000/4000-level major requirement in French literature. The course content may vary, but FRE 3035 may count only once in

fulfillment of major or minor program requirements in French. Prerequisite: one 2000-level FRE literature course (FRE 2025, FRE 2045, FRE 2055, or FRE 2065) or consent of the instructor. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

FRE 3040-FRENCH CULTURE & CIVIL

Alternate years.

A study of the culture of France and the francophone world from the Medieval to the Modern period as seen through social and political developments, cultural institutions, and the arts. This course satisfies the 3000/4000-level major requirement in French cultural studies. Prerequisites: FRE 2005 and FRE 2010 or consent of the instructor. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES

FRE 3050-MASTERWORKS OF FRANCOPHONE LIT

S. Alternate years.

This course will focus on select literary texts by writers of the French-speaking world beyond France, with special emphasis on (post) colonial literatures of francophone Africa and the Antilles. This course satisfies the 3000/4000-level major requirement in French

literature. The course content may vary, but FRE 3050 may count only once in fulfillment of major or minor program requirements in

French. Prerequisite: one 2000-level FRE literature course (FRE 2025, FRE 2045, FRE 2055, or FRE 2065) or consent of the instructor.

(WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

FRE 3065-FRANCOPHONE CULT THRU FILM

An in-depth study of selected films that reveal traditional and contemporary aspects of Francophone culture with focus on such issues as immigration and past colonization, nationalism, religion, freedom, education, parenthood, marriage, and aging. Special consideration of films produced in France, Africa, Canada, Belgium, and Switzerland. Laboratory work required. Prerequisites: junior or senior standing and FRE 3080. (MULTI-CULTURAL)  
FRE 3080-ADV GRAMMAR & COMPOSITION

Alternate years.

Intensive study of the various types of expository writing with emphasis on the morphology and idiomatic expressions of French.

Prerequisites: FRE 2005 and FRE 2010 or consent of the instructor. (WRITING)

FRE 3095-BUSINESS FRENCH

On Demand.

Focus on various types of business correspondence, with emphasis on current, specialized vocabulary pertinent to international trade and business, and ability to write and communicate via business letters, ads, memos, etc. Students must keep a "business portfolio."

Prerequisites: junior or senior standing and FRE 2005 or consent of the instructor.

FRE 4010-ASPECTS FRANCOPHONE CULT

Alternate years.

An in-depth study of French literature outside of France. Special consideration will be given to the themes and style of representative works from Africa, the Antilles, Madagascar, and Canada. Prerequisite: one 2000-level FRE literature course (FRE 2025, FRE 2045,

FRE 2055, or FRE 2065) or consent of the instructor. (WRITING)

FRE 4075-ADVANCED CONVERSATION

Development of skills necessary to express ideas fluently on contemporary cultural, literary, and professional issues. Prerequisites:

junior or senior standing and FRE 2010 or consent of the instructor.

FRE 4565-ADV FRENCH EXPRESSION

GEN ED: Capstone Experience

Students will have the opportunity to advance their oral and written proficiencies by examining and using different registers of

contemporary spoken French as well as analyzing different written genres. Their oral work will be based on reading and discussing

current articles from newspapers and periodicals; their written work will be modeled on selected literary and cultural narratives written

by experienced French writers. Prerequisites: senior or graduate standing and FRE 3080, or consent of the instructor. (WRITING)

[Dual-listed with FRE 5565.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

GER 1030-ACCELERATED BEGIN GERMAN

Combines GER 1010 and GER 1020. Open to students with no previous experience in German or whose German placement score

indicates deficiency. Meets daily for a total of 300 minutes per week. Laboratory work required.

GER 1040-INTERMEDIATE GERMAN I

Focus on various aspects of culture, society, literature, traditions, and daily preoccupations through continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: adequate score on the placement test or GER 1020, or GER 1030, or the equivalent. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

#### GER 1050-INTERMEDIATE GERMAN II

GEN ED: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

A continuation of GER 1040. Focus on various aspects of culture, society, literature, traditions, and daily preoccupations with continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: GER 1030 or GER 1040, or the equivalent. Laboratory work required.

(MULTI-CULTURAL) (CORE: HUMANITIES)

#### GER 1060-ACCELERATED INTERM GER

GEN ED\*: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

Combines GER 1040 and GER 1050. Prerequisite: GER 1020 or GER 1030, or the equivalent. Class meets daily for a total of 300

minutes per week. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

(\*NOTE: Only 3 s.h. of this 6 s.h. course may count for general education credit in a theme.)

IN ORDER TO REGISTER FOR COURSES TAUGHT IN GERMAN ON THE 2000 LEVEL OR ABOVE, STUDENTS MUST COMPLETE GER 1050

OR GER 1060 OR MAKE AN ADEQUATE SCORE ON THE PLACEMENT TEST.

#### GER 2010-CONVERSATION & COMPOS I

Emphasis on acquisition of a practical vocabulary and active use of the language. Shorter readings on contemporary German life provide subject matter for in-class discussion and regular written compositions. Prerequisite: GER 1050 or GER 1060, or the equivalent, or an adequate score on the placement test. Laboratory work required. Required for minors. (SPEAKING)

#### GER 2015-CONVERSATION & COMPOS II

Continues the goals of GER 2010, but with added emphasis on stylistic improvement in speaking and writing. Prerequisite: GER 2010 or consent of the advisor. Required for minors.

#### GER 2025. Introduction to Literature (3).F;S.

#### GER 2025-INTRO TO LITERATURE

Development of skills necessary for understanding of genre, concepts of literary structure, language, and criticism through examination of selected works. Prerequisite: GER 2010.

#### GER 2035-GERMAN THROUGH FILM

A study of modern German language and culture through film with special emphasis on cinematic representation of historical, political, and social contexts. Prerequisite: GER 2005 or GER 2010 or consent of the instructor. (WRITING)

GER 2055-GRT GRMN CIT II MOD CT CLT CXT

Taught in Germany as part of the department's short term study abroad program in Trier. This course offers an introduction to the social, political and cultural realities of contemporary Germany through the lens of development in the city of Trier, an ancient city constantly coming to terms with (and sometimes into conflict with) the demands of living in the twenty-first century. Prerequisite:

GER 1050 or consent of the instructor. (MULTI-CULTURAL)

GER 2500. Independent Study (1-3).F;S. On Demand.

GER 3015-SELECT OF GERMAN LIT I

A study of the works of representative German authors from the 8th to the 18th century.

Prerequisite: GER 2010 and GER 2015 or

consent of the advisor. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

GER 3025-SELECT OF GERMAN LIT II

A study of the works of representative German authors of the 19th and 20th centuries.

Prerequisite: GER 2010 and GER 2015 or

consent of the advisor. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

GER 3050-GRMN CULT CIVILIZ BEFORE 1900

On Demand.

Study of German institutions, philosophy, literature, and art prior to 1900. Prerequisites: GER 2010 and GER 2015 or consent of the instructor. (MULTI-CULTURAL) (CORE: HUMANITIES)

GER 3055-CULT & CIVIL MOD GERMANY

A study of the major cultural and literary changes in Germany after World War II, including changes in the social, economic, and educational systems. Prerequisites: GER 2010 and GER 2015 or consent of the advisor.

(WRITING; MULTI-CULTURAL) (CORE: HUMANITIES)

GER 3075-ADVANCED CONVERSATION

Review of the more difficult structures of the language. Introduction of additional vocabulary and idiomatic expressions which will allow the student to express complex ideas on contemporary and professional issues with fluency and an acceptable pronunciation.

Prerequisites: GER 2010 and GER 2015 or consent of the advisor.

GER 3080-ADV GRAMMAR & COMPOSITIO

Development of skills necessary to express fluently, and in depth, ideas on contemporary, cultural, literary, and professional issues.

Prerequisites: junior or senior standing, GER 2010 and GER 2015 or consent of the advisor.

GER 3090-BUSINESS GERMAN

This course provides an insight into the current German business world. Acquisition of the specialized language of social security, international finance, marketing, import and export trade, and trade unions. Prerequisites: GER 2010 and GER 2015, or consent of the advisor.

JPN 1040-INTERMEDIATE JAPANESE I

JPN 2001-ADVANCED JAPANESE I

Focuses on acquiring additional proficiency in speaking, listening, reading and writing.  
Prerequisite: JPN 1050 or consent of the instructor.

#### JPN 2003-ADVANCED JAPANESE II

Focuses on acquiring more advanced proficiency in speaking, listening, reading and writing.  
Laboratory work required. Prerequisite:  
JPN 2001 or consent of the instructor.

#### LAT 1010-BEGINNING LATIN I

Introduction to Latin and its influence on the Romance languages and English. Emphasis is placed on reading, writing, and translating.  
Laboratory work required.

#### LLC 1210-LANG & CULT: SELVES & OTHERS

This one-credit hour course is required for mentors in the Language and Culture Community. Class requirements will include readings and activities focusing on intercultural communication, as well as participation in intercultural skill building activities. Students (mentors) will work to implement among the first-year students of the Language and Culture Community what they practice and discuss in class with their mentees. LLC 1210 may be repeated for a total credit of three semester hours with different content.  
Graded on an S/U basis.

#### LLC 2025-LITERATURE IN TRANSLATION

GEN ED: Literary Studies Designation; Aesthetic Perspective (Theme: "How We Tell Stories")  
A study of various literatures in translation, from the medieval through the modern period, focusing on the language and culture areas featured in departmental offerings. Course content will vary and may concentrate on poetry, fiction, drama, or a combination.  
(MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

#### LLC 2050-SAY WHAT? LANG MIND & SOCIETY

GEN ED: Historical and Social Perspective (Theme: "Mind")  
An exploration of the issues surrounding human language and its relationship with thought, cognition and culture. Students will have the opportunity to learn how the sounds, structures and meanings of human languages are produced and interpreted, and will explore variation among world languages as well as the relationship among language, society and culture. Different theoretical approaches to these issues will be explained. The course will also examine the interaction between language and mind and the neurological basis of human language, and will look at the application of linguistic principles in language learning and artificial intelligence.

#### LLC 3010-SECOND LANG ACQUISITION

Alternate years.  
A survey of the leading theories of language acquisition (experiential, cognitive, linguistic-theoretical) and their application to ESL pedagogy. The fundamental questions addressed in the course will be: how learners acquire a second language; similarities between first and second language acquisition; and, ramifications of second language acquisition for classroom instruction. Prerequisites: two years of a language other than English and LLC 2050 or ENG 3610.

LLC 3020-LANG, SOC & TCH OF ESL

S. Alternate years.

This course examines the interaction of language in society and investigates the practices, tendencies and the associated difficulties of persons identified with one culture seeking to communicate with persons of another culture. The course emphasizes the effects of cross-cultural communication on second language teaching. Prerequisites: two years of a language other than English and LLC 2050 or ENG 3610.

LLC 3550-SUR CHINESE/JAPANESE LIT

To examine works of representative masters in various genres from the beginning to early twentieth century, by studying the translation of the works. Class is conducted in English. Prerequisite: ENG 1100.

LLC 4010-AFRO-HISPANIC LIT

A survey of Afro-Hispanic contributions to Spanish and Spanish American Literature in works written by Afro-Hispanic authors. An examination of literary themes on the life and culture of Blacks in Spanish-speaking America in the texts of representative Latin American authors underscoring outstanding historical facts and sociological concepts.

LLC 4020-EUR LANG CULT THRU FILMS

Comprehensive analysis of European cultures through films, with special emphasis on the historical, political, social, and philosophical representations of life in selected countries in recent decades.

POR 1040-INTERMEDIATE PORTUGUESE I

Focus on various aspects of culture, society, literature, traditions, and daily preoccupations through continued development of communicative language skills. Reinforcement, expansion and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: POR 1020 or consent of the instructor. Laboratory work required.

(MULTI-CULTURAL) (CORE: HUMANITI

POR 1050-INTERMEDIATE PORTUGUESE II

GEN ED: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

A continuation of POR 1040. Focus on various aspects of culture, society, literature, traditions, and daily preoccupations with continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: POR 1040 or the equivalent. Laboratory work required. (MULTI-CULTURAL) (CORE:

HUMANITIES)

RSN 1040-INTERMEDIATE RUSSIAN I

Focus on various aspects of culture, society, literature, traditions, and daily preoccupations through continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: RSN 1020 or consent of the instructor. Laboratory work required. (MULTI-CULTURAL) (CORE:

HUMANITIES)

RSN 1050-INTERMEDIATE RUSSIAN II

GEN ED: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

A continuation of RSN 1040. Focus on various aspects of culture, society, literature, traditions, and daily preoccupations with continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: RSN 1040 or the equivalent. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

RSN 2010-CONVERSATIONAL RUSSIAN I

Continues the goals of RSN 1050. Added emphasis on grammar, vocabulary, and stylistic improvements in speaking and writing through film, i.e., listening to Russian conversation as it is spoken today and practicing conversation patterns of modern Russian.

Prerequisite RSN 1050 or consent of the instructor.

RSN 2015-CONVERSATIONAL RUSSIAN II

A continuation of RUS 2010, with added emphasis on grammar, vocabulary and stylistic improvements in speaking and writing through discussion of modern Russian short fiction and other contemporary texts (e.g. newspapers, articles, and magazines). Prerequisite:

RSN 2010 or consent of the instructor.

SNH 1030-ACCELERATED BEGIN SPANIS

On Demand. Combines SNH 1010 and SNH 1020. Open to students with no previous experience in Spanish or whose Spanish placement score indicates deficiency. Meets daily for a total of 300 minutes per week. Laboratory work required.

SNH 1040-INTERMEDIATE SPANISH I

Focus on various aspects of culture, society, literature, traditions, and daily preoccupations through continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: adequate score on the placement test or SNH 1020, or SNH 1030, or the equivalent. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

SNH 1050-INTERMEDIATE SPANISH II

GEN ED: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

A continuation of SNH 1040. Focus on various aspects of culture, society, literature, traditions, and daily preoccupations with continued development of communicative language skills. Reinforcement, expansion, and synthesis of concepts of language and culture through contact with authentic materials. Prerequisite: SNH 1030 or SNH 1040, or the equivalent. Laboratory work required.

(MULTI-CULTURAL) (CORE: HUMANITIES)

SNH 1060-ACCELERATED INTERM SPAN

GEN ED\*: Local to Global Perspective (Themes: "Regions in Global Context" and "Performance of Culture")

Combines SNH 1040 and SNH 1050. Prerequisite: SNH 1020 or SNH 1030, or the equivalent.

Class meets daily for a total of 300

minutes per week. Laboratory work required. (MULTI-CULTURAL) (CORE: HUMANITIES)

(\*NOTE: Only 3 s.h. of this 6 s.h. course

may count for general education credit in a theme.)

IN ORDER TO REGISTER FOR COURSES TAUGHT IN SPANISH ON THE 2000 LEVEL OR ABOVE, STUDENTS MUST COMPLETE SNH

1050 OR SNH 1060 OR MAKE AN ADEQUATE SCORE ON THE PLACEMENT TEST.

SNH 2005-INTENSIVE GRAMMAR REVIEW

Comprehensive review for thorough understanding of the elements of the Spanish language necessary for students wishing to pursue

further studies in Spanish. Prerequisite: SNH 1050 or SNH 1060, or the equivalent, or an adequate score on the placement test.

Laboratory work required. Required for minors and majors.

SNH 2010-CONVERSATIONAL SPANISH

Emphasis on the acquisition of a practical vocabulary and active use of the language.

Prerequisite: SNH 1050 or SNH 1060 or the

equivalent, or an adequate score on the placement test. Laboratory work required. Required for minors and majors.

SNH 2021-SPANISH FOR HLTHCRE & SOC SERV

SNH 2025-INTRO TO LITERATURE

Development of skills necessary for understanding of genre, concepts of literary structure, language, and criticism through examination

of selected works. Prerequisite: SNH 2005. Required for majors.

SNH 3015-SELECT OF SPANISH LIT I

A study of the works of representative Spanish authors from the Middle Ages to the present.

Prerequisite: SNH 2025. (WRITING;

MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

SNH 3025-SELECT OF SNH-AMER LIT

A study of the works of representative Spanish American authors from the Precolumbian period to the present. Prerequisite: SNH

2025. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

SNH 3050-CULT & CIVIL OF SPAIN

A description of historical events, currents of thought, and artistic trends which have significantly contributed to the shaping of a

Spanish vision and practice of life. Prerequisites: SNH 2005 and SNH 2010, or consent of the advisor. (WRITING; MULTI-CULTURAL)

(CORE: HUMANITIES)

SNH 3055-CULT CIVIL OF SNH-AMER

A description of historical events, currents of thought, artistic trends, aboriginal and European inheritance, and other factors which

significantly contributed to the shaping of a Spanish-American vision and practice of life.

Prerequisites: SNH 2005 and SNH 2010,

or consent of the advisor. (WRITING; MULTI-CULTURAL) (CORE: HUMANITIES)

SNH 3080-ADV GRAMMAR & COMPOSITION



GEN ED: Junior Writing in the Discipline (WID)

Intensive study of the various types of expository writing with emphasis on the morphology and idiomatic expressions of Spanish.

Prerequisites: SNH 2005 and SNH 2010, or consent of the advisor; and ENG 2001 or its equivalent. Required for majors. (WRITING)

SNH 3250-THE ARTS IN SPAIN

Taught in Spain and on study abroad. This course offers an overview of art produced in Spain throughout its history in the context

of that history. Prerequisites: SNH 2005 and SNH 2010 or consent of the instructor.

SNH 3251-SPAIN TODAY

This course offers an introduction to the social, political and cultural realities of contemporary Spain. Prerequisites: SNH 2005 and

SNH 2010 or consent of the instructor.

SNH 3350-FILM IN CONTEMPORARY SPAIN

This elective course explores the cultural development of Spain in the last five decades through the work of contemporary Spanish

filmmakers. The course will introduce students not only to internationally known Spanish films but also to films less well known to

U.S. audiences. Prerequisites: SNH 2005 and SNH 2010 or consent of the instructor.

SNH 3415-CONTEMPORARY SPANISH POETRY

The course presents a survey of the most influential poets writing in Spanish (Spain and Latin America) in the twentieth century,

among them poets such as: Vicente Huidobro, César Vallejo, Juan Larrea, Jorge Luis Borges, Federico García Lorca, and Pablo Neruda.

Selected texts are accompanied by a set of theoretical readings and critical essays. Prerequisite: SNH 2025 or consent of the instructor.

SNH 3425-U.S. HISPANIC LITERATURE

This course examines the literature produced by Spanish-speaking authors in what is now the United States from the 16th century

to the present. Students will explore the history and diversity of U.S. Hispanic literature in depth and breadth including, but not

limited to, the recent phenomenon known as the Chicano movement. A focus on contemporary Latino/a authors will enable students

to develop a critical understanding of the cultural politics of border crossings. Prerequisite: SNH 2025 or consent of the instructor

SNH 4001-HISPANIC CHLDREN & ADOLES LIT

Critical readings of literary works in different genres written for children and adolescents. Study of the evolution and theory of children's

and adolescent literature in Latin America and Spain. Special focus on the cultural background, cross-cultural ties, and pedagogy of

children's and adolescent literature. Prerequisites: senior standing and SNH 3080, or consent of the instructor. [Dual-listed with SNH

5001.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

SNH 4002-LATIN AMERICAN THOUGHT

This course is a study of the evolution of ideas in Latin America through the literature produced from the second part of the nineteenth century until the present. By reading and critically studying different literary genres (namely poetry, fiction, and essays), the student will gain a comprehensive understanding of how Latin-American poets, novelists, and essayists have shaped, transformed, mapped, and contributed to the evolution of what we call Latin American thought. Likewise, students will learn that Latin America is necessarily integrative and that it is and it has been interconnected with the world throughout history. The skills that the students will have the opportunity to learn in this course can be applied to a number of disciplines beyond literature, namely politics, negotiation, business, and conflict resolution. Prerequisites: SNH 2025 and junior or senior standing.

#### SNH 4003-HISPANIC SHORT FICTION

A study of the short story in Hispanic literature, which will examine the genre from a cultural and literary perspective. Readings and commentary of selected short stories, especially by women and ethnic authors, will trace the history of the genre and explore its main themes. Primary sources will be complemented by literary historical and critical readings. Prerequisites: senior standing and SNH 3080, or consent of the instructor. [Dual-listed with SNH 5003.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### SNH 4005-20TH CENTURY HISPANIC NOVEL

A study of the most representative texts of the 20th century Hispanic novel in relation to the respective literary and cultural movements of the time in which the novels were written. The study of primary texts will be complemented by theoretical and critical readings. [Dual-listed with SNH 5005.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### SNH 4063-HISPANIC LIFE-WAYS

An overview of present-day Spain and Spanish America through a thematic approach to such topics as geography, demography, national festivals, lifestyles and cultural patterns. Examination of the contributions of Spain and Spanish America and their influence on the United States. Prerequisites: junior or senior standing and SNH 2010. (WRITING; MULTI-CULTURAL)

#### SNH 4075-ADVANCED CONVERSATION

Development of skills necessary to express ideas fluently on contemporary, cultural, literary, and professional issues. Prerequisites: junior or senior standing and SNH 2010 or consent of the advisor. (SPEAKING)

#### SNH 4090-BUSINESS SPANISH

Focus on various types of business correspondence, with emphasis on current, specialized vocabulary pertinent to trade and business. Prerequisites: junior or senior standing and SNH 2010 or consent of the advisor.

#### SNH 4565-ADV SPANISH EXPRESSION

On Demand.

GEN ED: Capstone Experience

An advanced language course where students will have the opportunity to perfect their mastery of the spoken and written language.

Students will explore different writing genres and model their work on the literary and cultural narratives written by experienced

Spanish writers, and will be provided with the necessary tools to develop their oral language skills. Prerequisites: senior or graduate

standing and SNH 3080, or consent of the instructor. (WRITING) [Dual-listed with SNH 5565.]

Dual-listed courses require senior

standing; juniors may enroll with permission of the department.

GHY 1010-INTRO PHYSICAL GEOG

GEN ED: Local to Global Perspective (Theme: "Sustainability and Global Change")

A comprehensive study of our physical earth emphasizing the distributional patterns and inter-relatedness of its land, soils, natural

vegetation and habitat, and weather and climate. Examinations of environmental issues

including hazardous wastes, acid rain, floods,

droughts, deforestation and air pollution. (CORE: SOCIAL SCIENCES)

GHY 1011-GLOBAL CLIMATE CHANGE

GEN ED: Science Inquiry Perspective (Theme: "Global Environmental Change")

This course provides a scientific examination of global climate change, including the physical patterns within the atmosphere, climate

change due to both natural and anthropogenic forcing mechanisms, and projections of future change at various spatial scales. Students

will employ the scientific method in a series of field-based experiments to answer problems and address issues that complement the

Geography and Planning The College of Arts and Sciences

lecture material and focus on aspects of global climate change. Lecture three hours, laboratory two hours.

GHY 1012-GLOBAL CHANGE OF THE BIOSPHERE

GEN ED: Science Inquiry Perspective (Theme: "Global Environmental Change")

An introduction to the patterns, dynamics, and causes of change in the biosphere. Students will examine the fundamental geographic

determinants of biodiversity patterns and the natural and human factors that drive biotic change, including climate change, land

cover change, and biological invasions. Students will use the scientific method in hands-on laboratory activities to investigate causal

relationships between global change processes and biome shifts, species migration, extinction, and loss of biodiversity. Lecture three

hours, laboratory two hours.

GHY 1020-WORLD REGIONAL GEOG

GEN ED: Local to Global Perspective (Themes: "Global Resources" and "Regions in Global Context")

The study of our contemporary world divided into the regions of North America, Central and South America, Africa, the Middle East, Europe, the Russian Realm, and South, East and Southeast Asia. Examination of global issues including population problems, technology and culture change, rural versus urban development, resource exportation and international trade, political identity and international conflict. (MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

GHY 1040-INTROD TO HUMAN GEOGRAPHY

GEN ED: Historical and Social Perspective (Theme: "Cultural Diversity")

This course examines the spatial patterns of human society. By focusing on the description and analysis of the spatial dimensions of human language, economy, religion and government, this course is a celebration of human diversity. Lectures, readings, films, slides, writing exercises, map quizzes and class discussions will help the student to understand and appreciate the geography of the human mosaic. (MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

GHY 1999-EXPERIENTIAL LEARNING

An introduction to geospatial data and technology used by geographers, planners and others. This includes the collection, management and output of geospatial data. Topics include computing fundamentals, Geographic Information Systems (GIS), Global Positioning System (GPS), remote sensing, and database management systems. Lecture two hours, laboratory two hours. (Same as PLN 2812.)

(NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

GHY 2812-GEOSPATIAL DATA & TECHNOLOGY

An introduction to geospatial data and technology used by geographers, planners and others. This includes the collection, management and output of geospatial data. Topics include computing fundamentals, Geographic Information Systems (GIS), Global Positioning System (GPS), remote sensing, and database management systems. Lecture two hours, laboratory two hours. (Same as PLN 2812.)

(NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

GHY 3011-EUROPE & RUSSIAN REALM

A study of this region's contemporary geographic condition. Emphasis on resource development, superregional cooperation, environmental problems, industrial shifts, marketing and international trade, relations with the United States, and the potential for internal and international political stress. (WRITING; MULTI-CULTURAL)

GHY 3012-U. S. AND CANADA

A survey of the physical, demographic, economic, and political patterns in the United States and Canada, with a focus on characteristics of regions. Students will examine historical and contemporary factors contributing to the geographic diversity and interdependence of the two countries. (WRITING)

GHY 3013-NORTH CAROLINA

The study of contemporary conditions and problems of land and people in a southern state. Topics include: economic development and potential for change, population mobility, urbanization and the impact of development in rural and environmentally fragile areas, regional impact of changing life styles, national and international interdependence. Recommended for future North Carolina teachers, public administrators and business leaders.

#### GHY 3014-GEOG OF LATIN AMERICA

This course stresses the diversity of physical environments, cultural traditions, and economic activities within Latin America and places special emphasis on the unique approaches that geographers bring to the study of this region. This course develops understanding of spatial patterns in Latin America through current readings, class discussions, lectures, slides, and videos. (MULTI-CULTURAL)

#### GHY 3015-THE GEOGRAPHY OF ASIA

An introductory survey of the region. Emphasis is placed on the geographical patterns and the similarities and differences in physical and cultural environments, population growth, mobility and urbanization; natural resource location and exploitation; economic growth and international linkages; the environmental implications of development; and political stability and change. (WRITING; MULTI-CULTURAL)

#### GHY 3016-GEOGRAPHY OF AMERICAN SOUTH

#### GHY 3100-WEATHER AND CLIMATE

This course focuses on the basic principles, elements, and controls of meteorology and climatology. The primary objectives are to familiarize the student with major components of the earth's atmosphere, to enhance the student's understanding of the spatial distribution of meteorological elements, and to demonstrate the interactions between human activities and atmospheric elements.

Prerequisite: GHY 1010 or permission of the instructor.

#### GHY 3110-VEG SOIL LANDFORMS

A systematic analysis of the spatial characteristics of vegetation, soils, and landforms especially as they interact in the North American realm. Consideration is given to the processes affecting the ecosystem and their relation to people's activities. Lecture two hours, laboratory two hours. Several extensive field trips are taken. Prerequisite: GHY 1010, or permission of the instructor.

#### GHY 3130-GEOGRAPHY OF BIODIVERSITY

A systematic analysis of the spatial characteristics of vegetation, soils, and landforms especially as they interact in the North American realm. Consideration is given to the processes affecting the ecosystem and their relation to people's activities. Lecture two hours, laboratory two hours. Several extensive field trips are taken. Prerequisite: GHY 1010, or permission of the instructor.

#### GHY 3140-MOUNTAIN GEOGRAPHY

This course explores the physical and human dimensions of mountain environments. Specific topics include: global change in mountain environments, mountain meteorology, mountain hazards, glacial processes, mountain peoples and cultures, health and health care, human adaptation to mountains, and sustainable mountain development. Case studies are drawn from mountain regions around the world, especially the Appalachians, Andes, and Himalayas, with regional emphasis varying by the instructor.

#### GHY 3210-ECONOMIC GEOGRAPHY

The geographic analysis of world economic systems, regions and patterns, as affected by interrelationships between both human and physical variables. Emphasis will be equally divided between theoretical and real-world patterns. Specific subjects of study include agriculture, manufacturing, services, transportation, urban/rural relationships, international markets and trade, and cultural differences in economic patterns. Recommended for business majors and required for geography majors.

Prerequisite: one introductory course in either geography or economics. (WRITING; MULTI-CULTURAL)

#### GHY 3310-ENVIRON REMOTE SENSING

An introduction to remote sensing technologies used for environmental and geographic analysis. Topics include aerial photo interpretation, satellite sensors, analysis of satellite imagery, thermal and radar sensors, and applications of remote sensing technology for vegetation, hydrology, landform, settlement, and economic development studies. Lecture two hours, laboratory two hours.

#### GHY 3320-ENVIRON ISSUES IN APPALA

This course offers a systematic study of the physical and cultural setting of Appalachia. Topics include weather and climate, landforms, soils, vegetation, population, settlement and resource use. Emphasis is placed on the various interactions between people and their environment (e.g. air and water pollution, accelerated erosion, landslides). Field trips will be taken. (SPEAKING)

#### GHY 3510-ADV HONORS SEM IN GEOG

#### GHY 3520-INSTRUCTIONAL ASST

A supervised experience in the instructional process on the university level through direct participation in a classroom situation.

Graded on an S/U basis. Prerequisite: junior or senior standing. May be repeated for a total credit of three semester hours.

#### GHY 4620-SYNOPTIC & REG CLIMATOLO

(3).On Demand.

This course focuses on atmospheric controls and processes at the synoptic scale. Basic meteorological elements and concepts such as jet streams, long-range forecasting, cyclogenesis, and vorticity are discussed. Local and regional climatic patterns and anomalies are examined with respect to the dynamics of the large-scale circulation features of the atmosphere. Prerequisite: GHY 3100 or permission of the instructor. [Dual-listed with GHY 5620.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### GHY 4810-DIGITAL IMAGE PROCESSING

Course focuses on acquisition of digital images, image processing, image enhancement techniques for interpretation, and applications of remote sensing technology. Lecture two hours, laboratory two hours. Prerequisites: GHY 2812, GHY 3310 or permission of the instructor. (NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.) [Dual-listed with GHY 5810.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### GHY 4812-ADVANCED GIS

GIS is a wide ranging topic encompassing five distinct functions within a total system context. These functions are: 1) data input, 2) data storage, 3) data management, 4) data manipulation and analysis, and 5) data output. Emphasis will be placed on the applications frequently found in geography and planning. This course is project oriented to give the student maximum experience in each of the functions of a GIS and to allow the student to associate the technical areas of GIS with real-world scenarios. Lecture two hours, laboratory two hours. Prerequisite: GHY 3812 or equivalent experience required. (NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.) [Dual-listed with GHY 5812.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### GHY 4820-GEOGRAPHICAL HYDROLOGY

The study of the occurrence and movement of water on the earth, with a focus on applications of surface hydrology. Water movement through the hydrologic cycle, flood analysis, and water use/water policy are emphasized. Prerequisites: GHY 1010, GHY 3100, GHY 3110 or with permission of the instructor. [Dual-listed with GHY 5820.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### GHY 4830-SENIOR SEMINAR

GEN ED: Capstone Experience

This course provides a capstone experience, bringing together a variety of geography and planning skills, abilities and knowledge. It integrates academic concepts with real-world experience and helps the student advance from the undergraduate academic environment to a geography career and/or to graduate study. (Same as PLN 4830.) (WRITING; SPEAKING)

#### GHY 4900-INTERN GEOG PLANNING

The internship emphasizes field work in the areas of locational analysis, environmental assessment and impact, and/or land use planning and is conducted jointly with an appropriate public or private agency. The type of internship, location of field experience, and sponsoring agency must be satisfactory to the student and to the department. A research paper is required. Graded on an S/U basis.

#### PLN 2410-TOWN, CITY & REGIONAL PLAN

Introduction to the principles, philosophies, processes, and theories of planning. Emphasis is on planning techniques.

GEN ED: Junior Writing in the Discipline (WID)

#### PLN 3730-LAND USE REGULATIONS

This course teaches students about the uses and limitations of land use regulations at the local level.

#### PLN 3800-INTRO QUANTITATIVE METHODS

This course will introduce students to a suite of statistical methods used to address research questions.

#### PLN 4240-TRANSPORTATION GHY/PLANNING

This course examines the link between land use and the way people travel. Students will have the opportunity to study metropolitan area evolution, historical trends in transportation, and the combined effect of the two. Additional study explores the many facets of travel (foot, bike, transit, automobile) and specific land use planning practices that attempt to offer more choices for transportation and land use. (Same as GHY 4240.)

#### PLN 4425-TASK-ORIENTED GRP FACIL METH

Develop leadership and group facilitation skills through hands-on instruction that demonstrates how to conduct focused conversations, lead workshops, and accomplish action planning. Application opportunities using these skills include community development, organizational planning, education, government, and other occasions when people want to actively participate in the creation of their own futures. (Same as COM 4425.) (SPEAKING)

#### PLN 4450-PLAN SUSTAINABLE COMMUNITIES

This course familiarizes students with the opportunities and challenges of sustainable development in the context of community experience and civic life in the U.S. Emphasis is placed on linking collective behaviors; the social, ecological, and economic impacts of those behaviors; and strategies for increasing sustainability at the community scale. [Dual-listed with PLN 5450.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### PLN 4460-ENVIRON POLICY & PLANNING

This course familiarizes students with the philosophical, legal, and institutional foundations of environmental policy and planning in the United States. Students will have the opportunity to study policies and planning tools for federal, state, and local agencies.

[Dual-listed with PLN 5460.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### PLN 4470-COMMUNITY DEVELOPMENT



This course introduces students to conventional and alternative approaches to community development. Students will have the opportunity to study aims and strategies employed by community development professionals, activists, and community members in urban and rural settings. Topics for reading and discussion include: poverty and race, affordable housing, economic revitalization, environmental justice, and public participation in planning. [Dual-listed with PLN 5470.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### PLN 4700-PLANNING STUDIO

This advanced undergraduate studio course helps planning majors apply planning knowledge

#### PLN 4830-SENIOR SEMINAR

GEN ED: Capstone Experience

#### PLN 4900-INTERN/GEOG PLANNING

The internship emphasizes field work in the areas of locational analysis, environmental

#### GLY 1010-GENERAL GEOLOGY LABORATORY

GEN ED: Science Inquiry Perspective (Themes: "Restless Planet: Earth, Environment, and

#### GLY 1101-INTROD TO PHYSICAL GEOL

GEN ED: Science Inquiry Perspective (Theme: "Restless Planet: Earth, Environment, and

#### GLY 1102-INTROD TO HIST GEOLOGY

GEN ED: Science Inquiry Perspective (Themes: "Life, Earth, and Evolution" and "Restless

#### GLY 1103-ENVIR CHANGE, HAZARDS, RESOURC

GEN ED: Science Inquiry Perspective (Theme: "Restless Planet: Earth, Environment, and

#### GLY 1104-WATER: MOUNTAINS TO SEA

GEN ED: Science Inquiry Perspective (Themes: "The Blue Planet" and "Global Environmental

#### GLY 1105-OCEANOGRAPHY

GEN ED: Science Inquiry Perspective (Theme: "The Blue Planet")

#### GLY 1510-GEOL SCI HNRS - PHYSICAL

The origin, composition, and modification of the Earth and Earth materials through geologic

#### GLY 2250-EVOLUTION OF THE EARTH

This course consists of the integrated study of the physicochemical and biological systems of the earth and their evolution over time,

including investigation of the persistent linkage of geologic and biologic systems over earth's history. This course provides a basis for

understanding the stratigraphic, geochemical, geophysical, and paleontological data utilized to reconstruct earth history, including a

survey of the 4.5 billion years of earth system history, with special emphasis on the tectonic history of North America as observed

in the Appalachian Mountains. The course also provides a survey of the evolution of life over earth history, an introduction to the

paleontological principles utilized in understanding the fossil record of evolution, and an introduction to advanced methods of rock

and mineral identification and classification. Lecture three hours, laboratory three hours.

Prerequisite: one of the following courses:

GLY 1101, GLY 1102, GLY 1103, GLY 1104, or GLY 1105.

#### GLY 2301-HISTORY COAL PA TO PRESENT

GEN ED: Historical and Social Perspective (Theme: "Appalachia: Life, Culture, and Land")  
Coal has played a critical role in the history of the southern Appalachians. The geologic processes that formed coal and shaped the landscape into the steep ridges and hollows of the Appalachian coalfields have directly affected the human history of the region  
– from hunting in pre-colonial times, to settlement and subsistence farming in the 1800s, to mining and unionization in the 1900s, to mountaintop removal and natural gas/coalbed methane extraction in the last decade. This course covers the physical and chemical processes that form coal as well as the tectonic and geomorphologic processes that formed the landscape of the coalfields and shaped the agricultural practices of the early settlers. It examines the cultural history of coal mining and life in the company-owned coal camps and the political history of unionization through literature and film. The economics and environmental consequences of coal-fired power plants are discussed, and the environmental and occupational hazards associated with both underground and surface coal mining are analyzed from both a scientific and a sociological perspective. (Same as AS 2301.)

#### GLY 3025-PRINCIPLES OF PALEONTOLOGY

Ancient environments and their change through geologic time are characterized using the fossil remains of organisms. The distribution of organisms through time and space is applied in this course to solve problems in geology, archeology and conservation biology. Biological evolution is studied in the scope of major events in Earth's history. Lecture two hours, laboratory three hours. Prerequisite(s):  
GLY 2250 (4 s.h.) OR 6 s.h. at the 2000-level or above in either BIO or ANT. (WRITING; CROSS-DISCIPLINARY; NUMERICAL DATA)  
(ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### GLY 3131-GEOCHEMISTRY

Ancient environments and their change through geologic time are characterized using the fossil remains of organisms. The distribution of organisms through time and space is applied in this course to solve problems in geology, archeology and conservation biology. Biological evolution is studied in the scope of major events in Earth's history. Lecture two hours, laboratory three hours. Prerequisite(s):  
GLY 2250 (4 s.h.) OR 6 s.h. at the 2000-level or above in either BIO or ANT. (WRITING; CROSS-DISCIPLINARY; NUMERICAL DATA)  
(ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### GLY 3333-GEOMORPHOLOGY

This course includes a study of the nature of landforms. Qualitative and quantitative aspects of landform analysis in the field and laboratory using maps and aerial photographs are introduced. Prerequisites: at least six hours of geology courses or consent of the instructor. Lecture two hours, laboratory three hours. (WRITING; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### GLY 3521-SECONDARY SCIENCE FLD EXP

A supervised experience in the instructional process at the secondary school level through direct participation in a classroom situation.

Graded on an S/U basis. Prerequisite: junior or senior standing. May be repeated for a total credit of three semester hours.

Required of all teacher-licensure candidates in geology.

#### GLY 3680-GEOARCHAEOLOGY

The course focuses on fundamental concepts in geoarchaeology and covers the application of earth science concepts, techniques and knowledge to the study of artifacts and the processes involved in the formation of the archaeological record. Preservation of paleoclimate signals in the geological record is considered. Case studies will consider specific North American and global examples.

Prerequisite: four semester hours of geology or permission of the instructor.

#### GLY 3703-ISSUES IN ENVIRONMENTAL GLY

An in-depth study of critical issues in environmental geology on a regional and global scale.

Topics to be covered include: natural hazards, water, mineral and energy resources, and related waste disposal problems under pressures of increasing human population and changing climate. This course will make use of case studies to illustrate specific examples.

Lecture three hours. Prerequisite:

one year sequence in natural science, e.g., BIO 1101 and BIO 1102; GLY 1101-GLY 1102; PHY 1103-PHY 1104; or CHE 1101, CHE 1110 and CHE 1102, CHE 1120.

#### GLY 3800-SEDIMENTOLOGY & STRATIGRAPHY

Properties, classification, and depositional models of sedimentary rocks. Principles of stratigraphy and interpretation of stratigraphic data will be studied with an emphasis on field relationships and applications. Lecture two hours, laboratory three hours. Prerequisite:

GLY 2250.

#### GLY 4630-HYDROGEOLOGY

The occurrence of groundwater resources, factors governing groundwater movement through aquifers, and an analysis of techniques for measuring a water resource are the focus of this course. Groundwater contamination and remediation methods will be introduced.

Lecture two hours, laboratory three hours. Prerequisites: at least junior standing and a minimum of six semester hours of geology

courses above the 1000 level, or permission of the instructor. (NUMERICAL DATA) (ND

Prerequisite: passing the math placement

test or successful completion of MAT 0010.) [Dual-listed with GLY 5630.] Dual-listed courses require senior standing; juniors may

enroll with permission of the department.

#### GLY 4705-ADV ENVIR & ENGINEER GLY

The occurrence of groundwater resources, factors governing groundwater movement through aquifers, and an analysis of techniques for measuring a water resource are the focus of this course. Groundwater contamination and remediation methods will be introduced.

Lecture two hours, laboratory three hours. Prerequisites: at least junior standing and a minimum of six semester hours of geology courses above the 1000 level, or permission of the instructor. (NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.) [Dual-listed with GLY 5630.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

HIS 1130-THEMES IN GLOBAL HISTORY

HIS 1400-WORLD EMPIRES

HIS 1520-HONORS:PATTERNS OF GLOBAL HIST

GEN ED: Historical Studies Designation; Local to Global Perspective (Theme: "Regions in Global Context")

An honors course examining selected themes in global history with an emphasis on the historical context of global issues, processes, trends, and systems as they have affected local regions. HIS 1520 cannot be repeated for credit and does not count toward the requirements for a History major or minor. (MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

HIS 1525-HONORS:PROBLEMS GLOBAL HISTORY

GEN ED: Historical Studies Designation; Local to Global Perspective (Theme: "Regions in Global Context")

An in-depth examination of selected events, issues, systems, processes, or developments in global history, and their relationship to and effect upon local regions. Particular emphasis will be given to development of critical thinking skills appropriate to historical inquiry. HIS 1525 cannot be repeated for credit and does not count toward the requirements for a History major or minor. (MULTICULTURAL) (CORE: SOCIAL SCIENCES)

HIS 1600-MIGRATION IN WORLD HISTORY

HIS 2101-THE WORLD SINCE 1945

HIS 2320-EAST ASIAN HISTORY: TO 1600

HIS 2322-HIS OF TRADITIONAL CHINA

HIS 2421-HIST OF AFRICA TO 1850

HIS 2422-HIS OF AFRICA SINCE 1850

HIS 2510-SO HONORS:AM CIV TO 1876

A study of topics in American history through post Civil War reconstruction. Enrollment by invitation of the department or application.

(Major may substitute for HIS 2201.) (WRITING)

HIS 2515-SO HONORS:AM CIV S 1876

A study of topics in American history from the Gilded Age to the Contemporary Era. Enrollment by invitation of the department or

application. (Major may substitute for HIS 2204.) (WRITING)

HIS 3155-RUSSIA: 16TH TO 20TH CENTURY

This course will examine the basic values and principles of traditional Russian civilization, which were inherited, accommodated, and then changed during the Soviet period (1917-1991) and which are springing up again in the time of complicated transition to democracy. The focus will also be made on the reforms of Peter I and Alexander II to the rise and fall of the Soviet Empire and to the last painful attempts to build democratic state and society. This broad survey will consider themes related to Russians and non-Russians alike, cultural interactions between them in the process of Russian exploration and expansion; migration and settlement patterns; ranching, mining, and other extractive industries; families; labor; water; urbanization; and myth-building.

HIS 3224-ANTEBELLUM AMERICA

A study of the United States from the end of the War of 1812 until the Civil War. Variable content. Topics include the meaning of

Jacksonian democracy; slavery and race relations; the antislavery movement and the rise of social reform movements including

temperance, utopianism, and women's rights; Indian removal; the market economy; the westward movement; the Mexican American

War; the free soil movement; and the secession crisis.

HIS 3226-THE U.S. CIVIL WAR

A study of the United States from the end of the War of 1812 until the Civil War. Variable content. Topics include the meaning of

Jacksonian democracy; slavery and race relations; the antislavery movement and the rise of social reform movements including

temperance, utopianism, and women's rights; Indian removal; the market economy; the westward movement; the Mexican American

War; the free soil movement; and the secession crisis.

HIS 3228-GILDED AGE PROG ERA

An analysis of the responses of the American people to the rise of the urban-industrial nation. Problems associated with the growth

of the city, capital-labor confrontations, social mobility, black-white relations, reform movements, cultural and intellectual affairs,

American imperialism, and representative biography are examined.

HIS 3230-RECENT US HISTORY

American history since 1920, with emphasis on domestic social and political developments in the post-1945 period. Organized around

the theme of the rise and relative decline of the middle class, major topics include the Cold War, the Civil Rights Movement, the Baby Boom, suburbanization, the rise of rock'n'roll, the Vietnam War, the Counterculture, Watergate, the Energy Crisis, and Reaganism.

Course features music and films as well as lectures.

#### HIS 3233-HISTORY OF THE AMERICAN WEST

This course examines the history of the Trans-Mississippian West from Native occupation to the twentieth century. The course considers how Native Americans lived in their environment; how the West was explored, settled, and developed by Europeans and Americans; how different ethnic and racial groups interacted and shaped each other's experiences; how men and women experienced the West; and how the West has influenced the development of the United States. It also explores the meaning of the West in the American consciousness and the place of the West in understanding American History. (WRITING)

#### HIS 3237-NATURE WILDERNESS AMER LIFE

Odd-numbered years.

This course provides an overview of Americans' interaction with the natural world from colonization to the present, with emphasis on Native Americans' relationship to the land, the environmental effects of European settlement, wilderness as a cultural construct, the growth of agriculture and industry, conservation and preservation, atomic energy, chemical pesticides, and the modern environmental movements. This course may be of particular interest to public historians, cultural resource managers, planners, and environmental specialists.

#### HIS 3238-AMERICA'S NATIONAL PARKS

A survey of the history of America's national parks from the nineteenth century to the present with emphasis on Americans' changing ideas about wilderness preservation, the early history of Yosemite and Yellowstone, the role of railroads in park promotion, removal of Native Americans and white settlers from park sites, establishment of the National Park Service, the impact of the automobile on tourism, the creation of national parks in the East, wildlife policy, overcrowding, and other problems facing modern parks.

#### HIS 3301-HISTORY OF THE SOUTHERN CONE

Even-numbered years.

In this course, students review colonial differences and explore the history of Chile, Argentina, Paraguay, and Uruguay from independence to the present, moving both geographically and chronologically to cover the four national histories. While the course will emphasize industrial development, social consolidation, political control, labor mobilization, and international responses, students will also examine genocide, guerrilla insurrections, peasant organization, linguistic policies, immigration and internal development. The class will debate recent economic coalitions and alternatives to globalization. Students complement the general chronological approach with thematic examples from the four southern countries to examine the recent changes and to assess area trends and directions.

#### HIS 3303-HISTORY OF MEXICO

Traces the evolution of Mexican society from pre- Columbian times to the present. Topics include the Maya and Aztec civilizations; the Spanish colonial heritage; the nation's struggle for independence; the tumultuous Mexican Revolution; and problems of economic development in the twentieth century. (WRITING; MULTI-CULTURAL)

#### HIS 3306-INDIGENOUS RESIST MOD LAT AMER

Even-numbered years.

Once nearly annihilated, indigenous people have returned to play an increasingly important role in Latin America. The last decade has shown native influences to national constitutions, environmental protection and human rights as indigenous nations struggled creatively to retain political, cultural and economic autonomy. Students explore ethnic consciousness and resistance to see beyond stereotypes and understand native groups as historical actors. Texts, films and discussions focus on the contradictory way native peoples have shaped state politics and economies within a changing environment.

#### HIS 3322-HISTORY OF MODERN CHINA

Odd-numbered years.

Traces the course of man's longest and largest continuous government and the development of Chinese culture and nationalism which has culminated in the founding of the People's Republic of China, a nation that constitutes one-fourth of the human race.

(WRITING; SPEAKING; MULTI-CULTURAL)

#### HIS 3338-AFR ENVIR HIST ANTIQUITY-1500

Beginning with methodological and theoretical approach within the belief that "Africa's environmental history is written on its landscape," the course visits the challenges of studying pre-literate societies, where the environmental study itself produces a spectacular answer to the dearth of written account. This course examines the interaction between people and natural phenomena and it addresses such questions as what influenced the settlement patterns and development of diverse cultures in different regions of Africa.

The origin of human civilization in Africa as the "accepted cradle of mankind" is explored in detail using visual materials, primary and secondary sources. (MULTI-CULTURAL)

#### HIS 3339-AFRI ENVIRON HIST SINCE 1500

This course explores the interaction between African people and their physical environment from 1500 to the end of the twentieth century. Organized thematically or chronologically, this course examines the intersection between African environmental practice and Western scientific currents of the post industrial era. (MULTI-CULTURAL)

#### HIS 3524-WORLD ECON HIST & THEORY

Even-numbered years.

GEN ED: Historical and Social Perspective (Theme: "Capitalism and Its Critics")

This course traces the development of the world economy to the present, focusing on the search for the determinants of economic success and the various solutions that have been offered. The long term changes in world income and population are quantified (mainly for the second millennium), the forces that explain the success of rich countries are identified, and the obstacles that hindered economic advance in lagging regions are explored. We will emphasize the interaction between empirical methods and interdisciplinary theories. The interaction between wealthy nations and the rest of the world is scrutinized to assess the degree to which backwardness may have been due to Western policy. Also, special emphasis will be placed on the analysis of government spending patterns and the economic impact of conflicts.

HIS 3528-COMPARATIVE LABOR HISTORY

Odd-numbered years.

A study of the development of labor in history, comparing labor process in different periods and regions. The course is particularly focused on the shift from agricultural to industrial labor, the varieties of industrial labor, and the emergence of post-industrial labor.

It analyzes the differences in the historical experiences of the advanced countries in Europe and North America with the historically backwards economies in the Third World. It explores the gendered experience of labor, forms of labor organization, and the growth of working-class cultures, as well as the relationship between labor and the state.

HIS 3720-HISTORY OF THE OLD SOUTH

Even-numbered years.

An examination of the development of America's major regional subculture; a study of significant trends in the social, intellectual, economic, and political evolution of the region from the seventeenth century to the beginning of the Civil War.

HIS 3722-POST-CIVIL WAR SOUTH

Even-numbered years.

An examination of the development of America's major regional subculture. A study of significant trends in the social, intellectual, economic, and political evolution of the region since the end of the American Civil War.

HIS 3726-HIST APPALACH REGION

GEN ED: Historical Studies Designation; Historical and Social Perspective (Theme: "Appalachia: Life, Culture, and Land")

A survey of the history of the Appalachian region from the period of exploration and settlement to the present. (WRITING)

MAT 2030-MATH FOR ELEM SCHL TEACHER



This course is an introduction to mathematical concepts, processes, and reasoning for the prospective elementary school teacher.

Topics include patterns, relationships, functions, data, probability, and statistics. Not open to mathematics majors or minors.

Prerequisite: MAT 1010 or permission of the instructor. (NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### MAT 3010-SURVEY HISTORY OF MATHEMATICS

A study of mathematics as a human intellectual endeavor impacting our culture, history, and philosophy. Includes analyses from the mathematical, historical, and philosophical perspectives, of several significant developments from various fields of mathematics.

The specific developments considered will vary from semester to semester. Prerequisites: MAT 1120 and either MAT 2110 or MAT

#### MAT 3015-JR SEMINAR MATH MAJORS EDUCATI

This course will address mathematics content and pedagogy issues of importance to secondary mathematics teachers. The North Carolina Mathematics Curriculum for high school will be introduced with emphasis on algebra and discrete mathematics. Class discussions, group activities, written assignments, and oral presentations will be integral parts of the course. A field experience and other professional development activities will be required outside of class. Prerequisites: MAT 2240 and MAT 3010.

#### MAT 3310-DISCRETE CONTINUOUS MATH MODEL

An introduction to the process of mathematical modeling. Topics will include an overview of the modeling process as well as graph theory, discrete and continuous dynamics, linear programming, combinatorics, and curve fitting with a particular emphasis on their use in modeling real world situations. It will also contain a treatment of topics from calculus,

#### MAT 3330-FINANCIAL MATHEMATICS

The objective of this course is to help students learn about the theory of interest as covered on the Casualty Actuarial Society (CAS)/Society of Actuaries (SOA) Course 2 examination. Topics include mathematical theory of compound interest, force of interest, annuities, equations of value, yield rates, amortization, sinking funds, bonds, depreciation, and other topics in finance. The concepts and models that will be discussed are a key part of modern actuarial science. Prerequisite: MAT 1120 or permission of the instructor

#### MAT 3340-ACTUARIAL MODELS

An introduction to the mathematics of modeling biological systems. Topics will be discussed in the context of both continuous and discrete models and be taken from a broad range of biological fields such as population ecology, evolutionary biology, cell biology,

#### MAT 3350-INTRO TO MATHEMATICAL BIOLOGY

An introduction to the mathematics of modeling biological systems. Topics will be discussed in the context of both continuous and discrete models and be taken from a broad range of biological fields such as population ecology, evolutionary biology, cell biology, genetics, and molecular biology. Numerical techniques for analysis and simulation will be introduced. Prerequisites: MAT 1120 and junior standing. (CROSS-DISCIPLINARY)

#### MAT 4010-CURRENT TOPICS IN MATHEMATICS

On Demand.

Permission to register must be given by the departmental chair. (WRITING)

#### MAT 4015-SR SEM MATH MAJ IN EDUC

This course is an extension of the junior seminar for mathematics majors in education. The course will extend the examination of the North Carolina Mathematics Curriculum for high school with emphasis on geometry and mathematical modeling. Class discussions, group activities, written assignments, and oral presentations will be integral parts of the course. A field experience and other

#### MAT 4040-MATHEMATICS CAPSTONE

GEN ED: Capstone Experience

MAT 4040 satisfies the general education capstone requirement for mathematics majors with concentrations other than education.

Students will explore current, relevant, or advanced undergraduate topics in mathematics and the relationships of mathematics with other fields. Oral and written communication skills are emphasized. Prerequisites: either MAT 3110 or MAT 3220, and senior standing in mathematics or permission of the instructor.

#### MAT 4400-SENIOR RESEARCH

A research project under the supervision of a mathematics faculty mentor. Written updates of progress will be completed every five weeks. A formal, typeset technical report of the results is to be submitted to the faculty upon completion of the project. Students cannot receive credit for both MAT 4510 and MAT 4400. Prerequisite: one 4000- level mathematics course. (WRITING)

#### STT 2820-REASONING WITH STATISTICS

GEN ED: Quantitative Literacy

An introduction to the design, analysis, and interpretation of statistical studies. Topics include representations for univariate and bivariate data distributions; designed methods for data collection and the role of randomness in statistical studies; probability and statistical distributions; statistical estimation, and statistical significance. Emphasis will be on the development of conceptual understanding and interpretation of results through simulation rather than a theoretical development.

#### STT 3250-FUNDAMENTALS OF PROBABILITY

#### STT 3840-ELEM PROB & SURV SAMPL

On Demand.

The course begins with an introduction to discrete probabilities and related applications. In particular, the application of probability to

PHL 1000-INTRODUCTION TO PHILOSOPHY

A general introduction to the basic patterns and methods of philosophy as presented through representative thinkers. (CORE: HUMANITIES)

PHL 1040-CRITICAL THINKING SKILLS

An introduction to the art of critical thinking, including identifying problems, locating assumptions and analyzing their impact on the products of thought, assessing causal claims, learning problem solving strategies, and examining creativity. (WRITING) (CORE: HUMANITIES)

PHL 1100-LOGIC I

This course is an introduction to logical reasoning. It will include the study of truth-functions, translations of English sentences into logical notation, truth-tables, deductions, and some fallacy identification. The concepts of validity, consistency, tautology, contradiction, and logical equivalence are introduced. Additional topics, such as category syllogisms, inductive reasoning, and quantification may be included at the discretion of the instructor. (CORE: HUMANITIES)

PHL 1501-EVERYDAY PHL: HIST & SOC PERSP

GEN ED: Historical and Social Perspective (Theme: "Mind")

An introduction to special problems, topics, or issues in philosophy from historical and social  
PHL 1502-EVERYDAY PHL: AESTHETICS

GEN ED: Aesthetic Perspective (Theme: "How We Tell Stories")

An introduction to special problems, topics, or issues in philosophy from aesthetic perspectives. The subject matter of this course will vary. (CORE: HUMANITIES)

PHL 1503-EVERYDAY PHL: LOCAL TO GLOBAL

GEN ED: Local to Global Perspective (Theme: "Identity, Culture, and Media")

An introduction to special problems, topics, or issues in philosophy regarding cultural diversity and the interrelationship between the local and the global. The subject matter of this course will vary. (CORE: HUMANITIES)

PHL 1504-EVERYDAY PHL: PERSP SCI & TECH

An introduction to philosophical approaches to special problems, topics, or issues in science and technology. The subject matter of this course will vary.

PHL 2000-PHILOSOPHY, SOCIETY, & ETHICS

GEN ED: Historical and Social Perspective (Theme: "Individual and Society")

An introduction to ethical reasoning and an examination of moral problems in contemporary social issues. (CORE: HUMANITIES)

#### PHL 2013-PHILOSOPHY OF ART

GEN ED: Aesthetic Perspective (Themes: "Traditions and Innovations" and "Analyzing Style and Form")

A course that concentrates on the interplay of art and philosophy in ancient through contemporary cultures. (WRITING; MULTICULTURAL; CROSS-DISCIPLINARY) (CORE: HUMANITIES)

#### PHL 2015-ENVIRONMENTAL ETHICS

GEN ED: Local to Global Perspective (Theme: "Sustainability and Global Change")

This course is an introduction to ethical dimensions of environmental issues. Students will have the opportunity to study theoretical perspectives such as deep ecology, ecofeminism, Native American views of the land, and social ecology. The course will also consider environmental ethical issues such as the moral status of nature, pesticide use, environmental racism, the treatment of animals,

#### PHL 2100-LOGIC II

A study of some major systems of logic, including a formal study of truth functions and quantification. The notions of proof, theorem and axiom are defined and some theory of logic is included. At the discretion of the instructor, additional topics may be included (for example, the logic of relations, boolean algebra systems, modal logic, the logic of probability or inductive logic).

#### PHL 2800-LIB & INF RSRCH IN PHILOSOPHY

This course focuses on developing skills in information-finding and other research techniques.

These skills will be used to conduct

Philosophy and Religion The College of Arts and Sciences

research and to build a foundation for life-long learning. Students will become familiar with the scholarly and professional resources

for philosophical research, both traditional and electronic. (COMPUTER)

#### PHL 3000-ANCIENT PHILOSOPHY

GEN ED: Junior Writing in the Discipline (WID)

A study of the major philosophers of Greece and Rome including the pre-Socratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans,

and the skeptics. Prerequisites: one course in philosophy or consent of the instructor and ENG 2001 or its equivalent. (WRITING;

MULTI-CULTURAL)

#### PHL 3013-PHILOSOPHICAL AESTHETICS

GEN ED: Junior Writing in the Discipline (WID)

This course will take a philosophical look at the nature of aesthetic experience. Our concern will be to understand what makes aesthetic

experience unique, what are the causes of aesthetic experience, how aesthetic experience might be related to our appreciation of

art and nature, and to examine what role knowledge and belief may play in aesthetic

#### PHL 3015-MEDICAL ETHICS

GEN ED: Junior Writing in the Discipline (WID)

This course aims to introduce students from a variety of backgrounds with an interest in health care to the central issues and

PHL 3030-FEMINIST PHILOSOPHY

GEN ED: Historical and Social Perspective (Theme: "Revolutions and Social Change")

GEN ED: Junior Writing in the Discipline (WID)

This course examines conceptual and normative issues in contemporary feminist theory. Issues to be discussed include power and

the production of knowledge, resistance, violence against women, sex and gender, the interrelatedness of gender, race, class, and

PHL 3040-SOC & POL PHILOSOPHY

Alternate years. (EFFECTIVE: FALL, 2012)

GEN ED: Junior Writing in the Discipline (WID)

This course examines some of the major developments in Western political thought. Through a philosophical lens, students will examine

the various and changing concepts that shape current political arrangements. Prerequisite: ENG 2001 or its equivalent. (WRITING)

PHL 3050-PHILOSOPHY OF RACE

GEN ED: Junior Writing in the Discipline (WID)

This course will examine the metaphysical epistemological, social, political, and ethical dimensions of race. Class readings will include

both historical and contemporary philosophical approaches to race and racism. Prerequisite: ENG 2001 or its equivalent. (WRITING)

PHL 3200-MODERN PHILOSOPHY

GEN ED: Junior Writing in the Discipline (WID)

A study of views of eminent philosophers of the seventeenth and eighteenth centuries, including Descartes, Hume, and Kant.

Prerequisites: one course in philosophy or consent of the instructor and ENG 2001 or its equivalent. (WRITING; MULTI-CULTURAL)

PHL 3300-RECENT ANGLO/AMER PHILOSOPHY

GEN ED: Junior Writing in the Discipline (WID)

This course is a study of recent American Philosophical Thought beginning with recent Anglo/European Philosophical movements

which have led to American Philosophical movements including: pragmatism, philosophical analysis, behaviorism, scientific realism,

and relativism. Philosophical writing may be drawn from such philosophers as: Carnap, Russell,

PHL 3400-CONTEMP CONTINENTAL PHILOSOPHY

GEN ED: Junior Writing in the Discipline (WID)

This course examines some important philosophers and movements in continental philosophy. Philosophical movements such as

Phenomenology, Existentialism, Critical Theory, Feminism, Postcolonial Theory, and

Poststructuralism will be discussed. Prerequisite:

PHL 3550-PHILOSOPHY OF MIND

GEN ED: Junior Writing in the Discipline (WID)

This course will examine some fundamental questions that arise in the philosophy of mind: What does it mean to say that a person has a mind? Are mental states (such as beliefs and desires) nothing but brain states, or are

PHL 3600-PHILOSOPHY OF SCIENCE

GEN ED: Junior Writing in the Discipline (WID)

An investigation of the foundations, structure, actual attainments, and ideals of the sciences. Prerequisites: one course in science or science education or philosophy or consent of the instructor and ENG 2001 or its equivalent. (WRITING) (CORE: HUMANITIES)

PHL 4000-NATURE OF KNOWLEDGE

A study of the traditional problems of the origin, nature, and limitations of knowledge. What do we know and how do we know it?

Prerequisites: PHL 2800 and one additional course in philosophy or consent of the instructor. (WRITING)

PHL 4300-ETHICAL THEORY

An examination of some major ethical theories and issues raised in relation to epistemology and language, such as the status of knowledge in ethics and the function of ethical language. Prerequisites: PHL 1000, PHL 2000, and PHL 2800, or consent of the instructor. (WRITING)

PHL 4510-SENIOR HONORS THESIS

On Demand. Independent study and research, directed by a member of the Philosophy faculty in the Department of Philosophy and Religion and a member of another department appropriate to the topic selected by the student.

Prerequisites: PHL 2800 and completion of six semester hours of Honors work below the 4000 level. (WRITING)

PHL 4549-SEMINAR

An intensive study of special problems, topics, or issues related to the study of philosophy. The subject matter of this course will vary and barring duplication of subject matter, a student may repeat the course for credit.

Prerequisites: PHL 2800 and one additional course in philosophy or consent of the instructor. (WRITING; SPEAKING) [Dual-listed with PHL 5649.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

PHL 4700-SENIOR RESEARCH: PHILOSOPHY

GEN ED: Capstone Experience

Designed for majors in Philosophy. Development and completion of an independent research project in the context of a seminar in which the student's ideas, drafts and thesis are questioned and defended. In addition to the discussion of each student's work, issues regarding the nature of philosophy will be discussed. This course provides an opportunity to utilize philosophical skills in a

REL 1010-INTRO TO RELIGION & LITERATURE

On Demand.

This course introduces the sacred texts and other writings of religious significance that contribute to the major religions of the world.

(MULTI-CULTURAL) (CORE: HUMANITIES/LITERATURE)

REL 1100-RELIGION & CONTEMPORARY ISSUES

GEN ED: Local to Global Perspective (Theme: "Identity, Culture and Media")

This course examines the relationship between religion and the issues that confront our world. Through the exploration of writings

Philosophy and Religion The College of Arts and Sciences

of religious significance and other material and media artifacts (art, architecture, music, media, political rhetoric, film, etc.), the

course considers how cultural and social influences shape religious expression and contribute to religion as a force in contemporary

REL 1110-RELIGIONS OF THE WORLD

GEN ED: Historical and Social Perspective (Themes: "Cultural Diversity" and "Religion, Myth, and Society")

This course introduces the major living religions of the world. (MULTI-CULTURAL) (CORE: HUMANITIES)

REL 2010-OLD TESTAMENT: JEWISH SCRIPT

GEN ED: Literary Studies Designation; Historical and Social Perspective (Theme: "Ancient Worlds") and Aesthetic Perspective (Theme: "Expressions of Belief")

An analysis of Old Testament literature as the product of the life of the Israelite people.

Students will have the opportunity to examine

selected documents in terms of their literary structure, historical context, and religious perspective. (WRITING; MULTI-CULTURAL)

(CORE: HUMANITIES/LITERATURE)

REL 2020-NEW TESTAMENT

GEN ED: Literary Studies Designation; Aesthetic Perspective (Themes: "How We Tell Stories" and "Expressions of Belief")

An analysis of early Christian literature as the product of the lives of the first followers of Jesus Christ. Students will have the opportunity

to examine selected documents in terms of their literary structure, audience, historical context, religious perspective, and their

relation to the broader Christian community and Western culture. (WRITING; MULTI-CULTURAL)

(CORE: HUMANITIES/LITERATURE)

REL 2030-ISLAMIC LITERATURE

An exploration of the Qur'an and of works that have shaped, illustrated, or supplemented Islamic beliefs and practices. (MULTICULTURAL)

(CORE: HUMANITIES/LITERATURE)

REL 2110-JUDAISM

An examination of the history, literature, and faith of post-exilic Judaism, with concentration on selected topics and periods. (WRITING;

MULTI-CULTURAL) (CORE: HUMANITIES)

REL 2120-CHRISTIANITY

GEN ED: Historical and Social Perspective (Theme: "Revolutions and Social Change")  
An exploration of Christianity from the early period through the Enlightenment and rise of contemporary Christian movements, students will explore the history of the church, its doctrinal emphases, and its practice in a variety of locations and time periods.

(WRITING; MULTI-CULTURAL) (CORE: HUMANITIES)

REL 2130-ISLAMIC RELIGION & CULTURE

A selective survey of the religion and its expression in Islamic civilization from the time of the prophet Muhammad to the contemporary

Islamic revival. (MULTI-CULTURAL) (CORE: HUMANITIES)

REL 2140-HINDUISM

An interdisciplinary examination of complex Hindu religious and philosophical traditions from Vedic culture to the contemporary

period, covering such topics as deity, guru, cosmos, body, ritual, karma, dharma, and yoga.

(WRITING; MULTI-CULTURAL) (CORE: HUMANITIES)

REL 2150-BUDDHISM

An interdisciplinary examination of the Theravada, Mahayana, and Vajrayana systems of Buddhist thought and practice, charting

their development on the South Asian subcontinent and eventual emergence as a religio-cultural force in East Asia, Europe, and

REL 2160-DAOISM

Alternate Years. An interdisciplinary examination of the development of Daoism, from Laozi to the contemporary period, in terms of the ways Daoists

experience themselves and the world, attempt immortality-oriented self-cultivation practices, and work toward their various individual

and socio-political goals.

REL 2170-THE CONFUCIAN WAY

Alternate years.

An examination of the intellectual history, development, and propagation of the important ideas, practices, and major schools of the

Confucian tradition and their influence on Asia and the world.

REL 3010-PROPHECY IN ANC ISRAELITE LIT

A study of the prophetic movement and its literature in the Hebrew Scriptures. Prerequisite:

REL 2010 or permission of the instructor.

(WRITING; MULTI-CULTURAL)

REL 3020-THE LIFE & LETTERS OF PAUL

A study of Paul's life and his role in shaping early Christianity. Prerequisite: REL 2020 or permission of the instructor. (WRITING;

MULTI-CULTURAL)

REL 3030-WOMEN IN BIBLICAL TRADITION



This course provides an extensive inquiry into women's stories and images in the Hebrew Bible, New Testament and Apocrypha. Feminist biblical criticism will be emphasized along with a careful study of what we can know about the lives of women in the periods in which these texts were composed. Prerequisite: REL 2010 or REL 2020 or permission of the instructor. (WRITING; CROSS-DISCIPLINARY)

#### REL 3110-RELIGION IN AMERICA

An examination of religious beliefs and practice in the United States. Prerequisite: REL 1110 or permission of the instructor. (WRITING)

#### REL 3120-AFRICAN THOUGHT

A selective survey of insights, systems of thought, and cosmologies of traditional folk religions, of African versions of global religions and of contemporary intellectuals. Prerequisite: REL 1110 or permission of the instructor. (MULTI-CULTURAL)

#### REL 3140-CHINESE MEDICINE

An interdisciplinary exploration and analysis of Chinese medicine, its fundamental theories, and its range of health-oriented and religious applications. Practical experience with the concepts and traditions discussed in this course is strongly encouraged.

#### REL 3150-RELIGION, CULTURE & THE BODY

A cross-cultural, multi-disciplinary exploration of the body as a malleable and multi-faceted locus of contested ideals that are informed by religion, medicine, and popular culture. We utilize academic studies, religious perspectives, Western viewpoints, global comparisons, and experiential learning to discuss and analyze various perceptions of the human

#### REL 3160-LIFE & TEACHINGS OF JESUS

3).S.Alternate years.

An examination of the historical Jesus of Nazareth, his life, message, and teachings, using the various methods of Biblical Criticism.

The class will focus on what can be known about the historical Jesus and different methodologies used in that pursuit.

#### REL 3170-RELIGION AND VIOLENCE

3).S.Alternate years.

Why does the history of world religions admit to several moments of violence? Why do the religious commit acts of violence not only against others but against themselves as well, for example, through acts of sacrifice and penance? Employing a multi-disciplinary approach, the course will address not only the historical, and what could possibly be perceived as the accidental, nature of violence in religion, but also and provocatively the structural role of violence in religion. (WRITING; CROSS-DISCIPLINARY)

#### REL 3180-AMERICAN JUDAISM

A study of Judaism in the American environment since 1654, focusing on its unique adaptation to the religious, social, political, and geographic environment of the United States.

#### REL 3600-STUDY TOUR ABROAD

OnDemand.

An intensive course exploring religious ideas and expression at a remote site.

#### REL 3700-RSRCH & METH IN RELIG STUDIES

GEN ED: Junior Writing in the Discipline (WID)

An introduction to major issues and the methods employed in the academic study of religion. Students will focus on acquiring the skills necessary to accomplish research in the field of religious studies. Prerequisites: REL 1010 or REL 1110; and ENG 2001 or its equivalent. (WRITING)

#### REL 3710-NATURE OF RELIGION

GEN ED: Junior Writing in the Discipline (WID)

#### REL 3730-NATURE-ORIENTED RELIGIONS

GEN ED: Junior Writing in the Discipline (WID)

A cross-cultural examination of religious groups - such as Australian Aborigines, Native American traditions, Shinto, and Contemporary Paganism - that are focused primarily on the natural world for their concept of the divine, and which provide conceptual resources for understandings of a healthy relationship with the earth. The theoretical foundations of the course use anthropological theories of religion and critical analytic methods for studying religion. Prerequisite: ENG 2001 or its equivalent. (WRITING)

#### REL 3740-RELIGION AND SOCIAL THEORY

GEN ED: Junior Writing in the Discipline (WID)

An examination of the different explanations of the role of religion in the world and its function within human society. The class will focus on the specific application of such theory to real world religious phenomena. Prerequisite:

#### REL 3750-MINDS, BRAIN, AND RELIGION

GEN ED: Junior Writing in the Discipline (WID)

An introduction to the psychological study of religious belief, experience, and behavior through a survey of various sub-disciplines within psychology: e.g., Freudian psychoanalysis, existential psychology, object relations theory, attachment theory, cognitive psychology, and evolutionary psychology. Prerequisites: REL 1110 or permission of the

#### REL 3760-RELIGION & REASON

GEN ED: Junior Writing in the Discipline (WID)

This course focuses on the analysis and discussion of religion in general rather than on any particular belief system and is a field of study that has been embraced by both believers and nonbelievers. The course discusses texts

#### REL 4015-BIBLICAL INTERPRETATION

GEN ED: Junior Writing in the Discipline (WID)

An intensive examination of methods and issues in biblical interpretation, with extensive experience in the interpretation of specific biblical texts from both testaments. Major issues in the history of interpretation will be discussed, with emphasis on contemporary methods. Prerequisites: REL 2010 or REL 2020 and junior or senior standing, or permission of the instructor and ENG 2001 or its equivalent. (WRITING)

REL 4115-RELIGION AND CULTURAL FORMS

An examination of the way religious themes and issues have found expression in various types of cultural forms such as literature, art, myth, ritual, etc. (WRITING; CROSS-DISCIPLINARY)

REL 4510-SENIOR HONORS THESIS

Independent study and research. Honors thesis directed by a faculty member in Religious Studies and a member of an affiliated department appropriate to the topic selected by the student. Prerequisite: completion of six semester hours of Honors work below the 4000 level. (WRITING)

REL 4700-SENIOR SEMINAR

GEN ED: Capstone Experience

An intensive study of special problems, topics, or issues related to the study of religion. The subject matter of this course will vary with the topic selected being focused on literature in the fall and culture in the spring. Prerequisite: completion of at least six semester

C J 3110-CRIME AND CULTURE

This course examines the images of crime and the criminal justice system as depicted through film, music, and literature.

C J 3115-RESEARCH METHODS

An introduction to the logic and techniques of social science research with computer applications, examination of the structure of scientific inquiry, methods utilized to analyze information, with emphasis placed upon the interpretation of that information. Lecture three hours, laboratory two hours. Required of all PS and CJ majors. Prerequisite: STT 1810 or the equivalent. (Same as PS 3115.)

C J 3121-INTERNATIONAL TERRORISM

This course introduces the student to the characteristics of international terrorism, the causes of terrorism, and the control of terrorism.

Throughout, students are presented key concepts to which they can refer for analyzing the future of international terrorism. (Same as PS 3121.)

C J 3400-THEORIES CRIME & JUSTICE

The course considers the underlying causes of crime and the social responses of justice, two constructs which transcend the boundaries of any one discipline or field of study. The course approaches the subject matter from a cross-disciplinary perspective. Explanations of crime causation from the perspectives of biology, psychology, sociology, political science, economics, and anthropology are presented, discussed, and evaluated. (CROSS-DISCIPLINARY)

C J 3450-INJUSTICE IN AMERICA

On Demand.

An assessment of the ideals and realities of American criminal justice processes, including law-making, policing, judicial process, correctional punishment, and media coverage of crime and criminal justice. The course takes a

C J 3888-DIVERSITY JUST & PUB AFFAIRS  
Critically examines race/ethnicity, gender, religion, sexual orientation, physical or mental ability and other diversity issues within criminal justice, and public affairs. This includes perspectives analyzing human rights, biological diversity, philosophical ethics, linguistic diversity, cultural diversity, and other relevant differences. (Same as PS 3888.) (MULTI-CULTURAL)

C J 4550-LAW & SOCIETY

An examination of the relationship between the values and culture of a society and the laws which it adopts and how law interacts with and responds to change in social values as seen by the courts through selected cases.

Prerequisite: junior or senior standing, or permission of the instructor. (Same as PS 4550.) (WRITING; SPEAKING) [Dual-listed with CJ 5550/PS 5550.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

P A 4560-LOCAL GOVT ADMIN

P A 4665-PUBLIC MANAGEMENT

P S 1100-AMER NAT GOVT & POLIT

GEN ED: Historical and Social Perspective (Theme: "This American Life")

A study of the development and operation of the American national government, its powers, organization and policies. (CORE: SOCIAL SCIENCES)

P S 1200-CURR POLITICAL ISSUES

GEN ED: Local to Global Perspective (Theme: "Democracy and Personal Life")

A study of the current political issues and problems facing the national government. Problems in such areas as labor, education, the economy, agriculture, equal rights, foreign relations and national security will be analyzed. Not open to students with credit for PS 1201. (CORE: SOCIAL SCIENCES)

P S 1201-CONTEMP POL CONTROVERS

On Demand.

An examination of some leading controversies in politics from the perspective of the conflicting arguments, designed to foster understanding of the issues and to enhance critical thinking and speaking skills. Intended primarily for students majoring or minoring in political science. Not open to students with credit for PS 1200. (SPEAKING) (CORE: SOCIAL SCIENCES)

P S 2120-INTL POLIT FOREIGN POL

An introduction to the study of international politics and foreign policy. Students will be introduced to a variety of analytical approaches to the study of global relations, including the participant, the systemic, the perceptual, and the instrumental frameworks. Students will be exposed to the complexities of international affairs and global relations which are the result of the confluence of historical, geographical, economic, cultural, and political factors. (MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

P S 2130-STATE & LOCAL GOVT

An examination of the organization, problems and powers of state and local governments in the United States, focusing upon the responses of states, counties, and municipalities to needs caused by poverty, growth, and social change. (CORE: SOCIAL SCIENCES)

P S 2160-INTROD PUBLIC ADMINIST

A general survey course aimed at introducing the student to the theory and practice of public administration. The course includes an introduction to organization theory, personnel and financial administration, and administrative responsibility. The principal focus is on American public administration, but some comparisons and illustrations from other administrative systems are included.

P S 2240-COMPARATIVE POLITICS

An examination of political system challenges and development patterns, with comparative reference to a number of systems including the Former Soviet Union, Britain, France, and selected African, Asian, and Latin American countries. (MULTI-CULTURAL) (CORE: SOCIAL SCIENCES)

P S 2610-ASIAN POLITICS

On Demand.

This course surveys the politics of East and Southeast Asia. It focuses on the experiences of everyday people dealing with political worlds different from our own. The readings include a mix of fictional and scholarly writing.

P S 3210-POL THEO 17TH C TO PRES

Alternate odd-numbered years.

A study of political thought from the seventeenth century to the present. Political philosophers studied include Hobbes, Locke, Rousseau, Burke, Hegel, Bentham, Marx, and Lenin. Emphasis is placed on the development of nationalism, capitalism, communism, socialism, and fascism. (CROSS-DISCIPLINARY)

P S 3230-AMER LEGISLATIVE POLIT

An examination of the structure, functions and behavior of Congress and state legislatures, with emphasis on how composition, leadership, constituency role orientations and interest groups actively influence public policy. The legislative institutions are also viewed in relationship to larger environments and inclusive political systems.

#### P S 3280-PUBLIC POLICY ANALYSIS

A study of the policy-making process, with special attention to the various factors that influence policy choices in the American government and an examination of the procedures for evaluating actual and alternative public policy programs. (WRITING)

#### P S 3310-POLITICAL IDEOLOGIES

On Demand.

A survey of the central ideas of various philosophers from the early Enlightenment to the late Twentieth Century. Special emphasis

#### P S 3320-GLOBAL CONFLICT & MED: THE UN

This course introduces students to the United Nations and its role in global conflict and

#### P S 3330-URBAN POLITICS

A focus upon politics in urban areas. Topics include the problems of urban government, politics

#### P S 3371-POLITICAL PERSUASION

On Demand.

This course will focus on the psychological study of political attitudes, covering topics such as attitude measurement, formation, change, and stability. Students will learn about the leading theories and empirical research concerning how various persuasive communications from the news media, elites, and other political actors shape public opinion.

On Demand.

An examination of the fundamental political problems and possibilities for the people in the Appalachian Region. The interrelationships of Appalachia with the larger American political system, political culture, and economy will also be studied.

#### P S 3660-ADMINISTRATIVE LAW

A study of the administrative powers and procedures in the United States and of the relevant experiences of some other democracies such as Britain, France with special attention to the legal and administrative methods of

#### P S 4175-PUBLIC OPINION

An examination of attitude and opinion formation within and among publics; the role and impact of government secrecy on opinion; and a study of media as influence mechanisms.

#### P S 4220-GLOBALIZATION

Alternate years.

Examines the interactions of politics, economic trends and business actions as they create patterns of international stability, crisis, and change. (Same as ANT 4220.)

#### P S 4550-LAW & SOCIETY

An examination of the relationship between the values and culture of a society and the laws which it adopts and how law interacts with and responds to change in social values as seen by the courts through selected cases.

Prerequisite: junior or senior standing,

or permission of the instructor. (Same as CJ 4550.) (WRITING; SPEAKING) [Dual-listed with PS 5550/CJ 5550.] Dual-listed courses

require senior standing; juniors may enroll with permission of the department.

#### P S 4661-COURT ADMINISTRATION

On Demand.

This course is designed to familiarize students with the need for, and approaches to, more effective management of federal and state

courts. Topics include court reform, court unification, caseload management, alternative dispute resolution, personnel management

and training, and audio-visual applications in the courts, among others. Prerequisite: junior or senior standing, or permission of the

instructor. (Same as CJ 4661.) (SPEAKING) [Dual-listed with PS 5661/CJ 5661.] Dual-listed

#### P S 4710-AMER POLITICAL THOUGHT

On Demand.

A survey of the diverse political ideas represented in the American state from the colonial period to the present. Special emphasis

is given to the political problems that emerge with the process of industrialization and the movement into a postindustrial economy.

#### P S 4721-HUMAN RIGHTS

On Demand.

The course surveys the major literature in the field of international human rights. It investigates the questions of ethics, morality

and the practice of human rights globally and attempts to address why the issue of international human rights has come to the fore

in international politics. [Dual-listed with PS 5721.] Dual-listed courses require senior standing; juniors may enroll with permission

of the department.

#### P S 4723-INT'L POLITICAL ECONOMY

Alternate years.

An examination of the relationship between political and economic activity, the way actors use one to manipulate the other, and the

normative choices involved in doing so. Prerequisite: junior or senior standing, or permission of the instructor. (WRITING; MULTICULTURAL;

CROSS-DISCIPLINARY) [Dual-listed with PS 5723.] Dual-listed courses require senior standing;

P S 4741-EUROPEAN GOVT & POLITICS

Alternate years.

An examination of patterns of governmental organization and socioeconomic policy outcomes in the democracies of Europe as a basis for comparative analysis. Major issues confronting the democracies will be studied for possible options and comparisons of policy.

Prerequisite: junior or senior standing, or permission of the instructor. (MULTI-CULTURAL) [Dual-listed with PS 5741.] Dual-listed

P S 4742-POLITICS DEVELOP NATIONS

Alternate years.

Focuses on the efforts of a majority of the world's governments to meet the twin challenges of participatory politics and of the Global market economy. Prerequisite: junior or senior standing, or permission of the instructor. [Dual-listed with PS 5742.] Dual-listed

courses require senior standing; juniors may enroll with permission of the department.

P S 4743-THE EUROPEAN UNION

Alternate years.

The emergence of the European Union is one of the major events in European history. The course explores the genesis and evolution of the idea of European integration and chronicles its organizational development in the post WWII era. Emphasis is placed on the politics of integration and the emergence of the Union as a major participant in world events. (WRITING; MULTI-CULTURAL) [Dual-listed

P S 4744-MIDDLE EAST POLITICS

An examination of the political, cultural, economic and social patterns of the Middle East.

Prerequisite: junior or senior standing, or permission of the instructor. [Dual-listed with PS 5744.] Dual-listed courses require senior standing; juniors may enroll with permission of the department

P S 4745-AFRICAN POLITICS

On Demand.

The course begins with the historical context of African politics. Then, it explores the problems of governance following independence and discusses the contemporary debate between two contending schools of thought in African politics and development: Afro-optimism and Afro-pessimism. It examines Africa's relations with developing and developed countries as well. [Dual-listed with PS 5745.]

Dual-listed courses require senior standing; juniors may enroll with permission of the department.

PHY 1101-HOW THINGS WORK



GEN ED: Science Inquiry Perspective (Themes: "How Things Work" and "Physics of Self Expression")

An introductory survey of the ideas of mechanics, fluids, wave motion, sound, light, and special relativity. Objects from our daily environment will be considered as their operation, histories, and relationships to one another are explored. This course seeks to dispel the mysteries surrounding everyday phenomena. Lecture three hours, laboratory two hours. Corequisite: MAT 1010 or MAT 1020 or MAT 1025. (NUMERICAL DATA; COMPUTER) (CORE: NATURAL SCIENCES) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### PHY 1102-ENVIRONMENT & EVERYDAY LIFE

GEN ED: Science Inquiry Perspective (Theme: "How Things Work")

An introductory survey of thermodynamics, electricity, magnetism, atomic and nuclear physics. Objects from our daily environment will be considered as their operation, histories, and relationships to one another are explored. Lecture three hours, laboratory two hours. Prerequisite: PHY 1101. PHY 1102 is not open to students who have credit for PHY 1830. (NUMERICAL DATA; COMPUTER) (CORE: NATURAL SCIENCES) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### PHY 1103-GENERAL PHYSICS I

GEN ED: (PHY 1103 and PHY 1104) Science Inquiry Perspective (Theme: "Physics of Our Technological World")

A study of the basic principles of physics including mechanics, thermodynamics, sound, electricity and magnetism, optics, and modern physics. Corequisite for PHY 1103: MAT 1020 or MAT 1025 or the equivalent. Prerequisite for PHY 1104: PHY 1103 or the equivalent. Lecture three hours, laboratory two hours. (NUMERICAL DATA) (CORE: NATURAL SCIENCES) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### PHY 1111-HOW THINGS WORK - LAB

GEN ED: Science Inquiry Perspective (Themes: "How Things Work" and "Physics of Self Expression") An introductory laboratory survey of the ideas of mechanics, fluids, wave motion, sound, and light. Objects from our daily environment will be considered as their operation, histories, and relationships to one another are explored. Laboratory two hours. Prerequisite: 3 credit hours of PHY 1101 transferred from another institution.

#### PHY 1112-ENVIRONMENT & EVERYDAY LIFE-LAB

GEN ED: Science Inquiry Perspective (Theme: "How Things Work")

An introductory laboratory survey of thermodynamics, electricity, magnetism, atomic and nuclear physics. Objects from our daily environment will be considered as their operation, histories, and relationships to one another are explored. Laboratory two hours. Prerequisite: 3 credit hours of PHY 1102 transferred from another institution.

PHY 1113-GENERAL PHYSICS I - LAB

GEN ED: Science Inquiry Perspective (Theme: "Physics of Our Technological World")

A laboratory study of the basic principles of physics including mechanics, thermodynamics, sound, electricity and magnetism, optics, and modern physics. Laboratory two hours. Prerequisite: 3 credit hours of PHY 1103 transferred from another institution.

PHY 1114-GENERAL PHYSICS II - LAB

GEN ED: Science Inquiry Perspective (Theme: "Physics of Our Technological World")

A laboratory study of the basic principles of physics including mechanics, thermodynamics, sound, electricity and magnetism, optics, and modern physics. Laboratory two hours. Prerequisite: 3 credit hours of PHY 1104 transferred from another institution.

PHY 1150-ANALYTICAL PHYSICS I

GEN ED: (PHY 1150 and PHY 1151) Science Inquiry Perspective (Theme: "Physics with Calculus")

An analytical and quantitative treatment of physics at a somewhat more advanced level than the PHY 1103-PHY 1104 sequence using calculus. Intended primarily for students majoring in the natural sciences, mathematical sciences, and pre-engineering. Topics covered include mechanics, heat, light, sound, electricity, magnetism, and quantum phenomena. Corequisite for PHY 1150: MAT 1110.

Corequisite for PHY 1151: MAT 1120. Lecture four hours, laboratory three hours. (NUMERICAL DATA) (CORE: NATURAL SCIENCES)

(ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

PHY 1151-ANALYTICAL PHYSICS II

PHY 1160-ANALYTICAL PHYSICS I - LAB

GEN ED: Science Inquiry Perspective (Theme: "Physics with Calculus")

Laboratory exercises in mechanics, heat, light, sound, electricity, magnetism, and quantum phenomena at a somewhat more advanced level than the PHY 1103-PHY 1104 sequence using calculus. Intended primarily for students majoring in the natural sciences, mathematical sciences, and pre-engineering. Laboratory three hours. Prerequisite: 3-4 credit hours of PHY 1150 transferred from another institution.

PHY 1161-ANALYTICAL PHYSICS II - LAB

GEN ED: Science Inquiry Perspective (Theme: "Physics with Calculus")

Laboratory exercises in mechanics, heat, light, sound, electricity, magnetism, and quantum phenomena at a somewhat more advanced level than the PHY 1103-PHY 1104 sequence using calculus. Intended primarily for students majoring in the natural sciences, mathematical sciences, and pre-engineering. Laboratory three hours. Prerequisite: 3-4 credit hours of PHY 1151 transferred from another institution.

PHY 1830-PHYSICAL PRINCIPLES ENERGY SUSTAIN

GEN ED: Local to Global Perspective (Theme: "Sustainability and Global Change")

An introduction to the physical principles governing energy and renewable technologies. Topics will include: thermal, geothermal, electrical, magnetic, wind, solar, hydroelectric, nuclear, and other sources of energy as well as other sustainable technologies such as conservation of material resources. PHY 1830 is not open to students who have credit for PHY 1102.

PHY 2010-INTERMEDIATE PHYSICS I

A study of basic formulations and concepts in classical physics including mechanics, static and dynamic electricity, and magnetism.

Calculus and vector methods are used. Intended primarily for students majoring or minoring in physics. Prerequisites: PHY 1104 or

PHY 1151, and for PHY 2010: MAT 1120; for PHY 2020: MAT 2130. Lecture four hours.

PHY 2020-INTERMEDIATE PHYSICS II

PHY 2210-PHY LAB TECH & DATA ANAL

GEN ED: Junior Writing in the Discipline (WID)

A course designed for physics majors emphasizing experimental techniques, measurements, data and error analysis, experimental planning and evaluation, and report writing. Intermediate classical experiments with both oral and written reports. Lecture two hours,

laboratory two hours. Prerequisite: ENG 2001 or its equivalent. Corequisite: PHY 2020.

(WRITING)

PHY 3140-ENVIRONMENTAL PHYSICS

A study of the physical principles underlying current environmental problems and issues such as global climate change and ozone

depletion, and an examination of possible mitigating technologies. Other topics include the interaction of electromagnetic radiation

and planetary atmospheres, radiative forcing, the greenhouse effect and the increased concentration of greenhouse gases in the

earth's atmosphere, the paleoclimate of the earth and global climate change, alternative energy sources, and the viability of nuclear

power. Prerequisite: PHY 1104 or PHY 1151. (CROSS-DISCIPLINARY)

PHY 3150-ATMOSPHERIC PHYSICS

An introduction to the principles of atmospheric physics. After a survey of climatology and the

PHY 3160-INTRODUCTION TO GEOPHYSICS

An introductory survey of whole earth geophysics through theory and practice. The theory

PHY 3210-MODERN PHYSICS I

An introduction to the theories and experiments of 20th-century physics: special relativity;

PHY 3211-MODERN PHYSICS II

An introduction to the theories and experiments of 20th-century physics: special relativity;

PHY 3230-THERMAL PHYSICS

A study of the laws of thermodynamics and their applications. An introduction to kinetic theory

PHY 3350-PHYSICAL SCI INVEST

On Demand.

PHY 3400-PHYSICS INSTR PRACTICUM

An introduction to the practical aspects of teaching high school physics. Some of the topics

PHY 3521-SECONDARY SCIENCE FLD EXP

A supervised experience in the instructional process at the secondary school level through direct

PHY 3560-UNDERGRADUATE RESEARCH

On Demand.

PHY 3850-ENVIRONUCLEONICS

On Demand.

PHY 3851-ENVIRONUCLEONICS LAB

On Demand.

PHY 4002-APPLIED PHYSICS LITERATURE

An introduction to technical and research journals in the areas of physics, electronics, and

PHY 4020-COMPUT METH PHY/ENGINEERING

A course designed to introduce the student to modern techniques and algorithms in

PHY 4210-METHODS EXPER PHYSICS

GEN ED: Capstone Experience

PHY 4740-SENSORS & TRANSDUCERS

This applications-oriented course covers the integration of transducers into sensor-based

PHY 4820-MEDICAL PHYSICS

A study of the application of the basic principles of physics to a selection of medical topics

PSY 1100-PSYCHOLOGY OF PARENTING

The study of social, multi-cultural, cognitive and behavioral principles in psychology as applied

PSY 2200-CAREERS IN PSYCHOLOGY

The study of research and theory of human physical, cognitive, social and emotional development from conception through maturity.

Topics include descriptions of typical human development and application of the principles of developmental psychology.

PSY 2210-PSY HUMAN GROWTH & DEVEL

Basic principles of personality structure, dynamics, development, assessment, and theory are discussed. Consideration is given to environmental and biological determinants of personality.

PSY 2211-PSYCHOLOGY OF PERSONALITY

Basic principles of personality structure, dynamics, development, assessment, and theory are discussed. Consideration is given to environmental and biological determinants of personality.

PSY 2212-ABNORMAL PSYCHOLOGY

An overview of the major forms of psychological disorders in children and adults. Emphasis is

PSY 2213-SURVEY OF SOCIAL PSYCHOLOGY

An overview of the basic principles of social psychology. A survey of the research findings and

PSY 2305-PSYCHOLOGY OF GENDER

An examination of selected psychological theories and research of the effects of gender.

Emphasis is placed on the cognitive, biological and sociocultural explanations of gender similarities and differences.

PSY 2500-INDEPENDENT STUDY

Prerequisite: PSY 1200.

PSY 2700-BEHAVIOR CHANGE

An introduction to behavior change principles and procedures employed in the helping professions. Instructional and practical experiences focus on the acquisition of communication and problem-solving skills used to manage problem behaviors

PSY 2999-EXPERIENTIAL LEARNING

PSY 3000-EDUCATIONAL PSYCHOLOGY

On Demand.

An overview of the development of the student and an analysis of the principles of classroom learning. Applicable theories of child and adolescent development and major concepts, theories, and research in the acquisition of knowledge and interpersonal social skills are emphasized. Special attention is given to the educational application of these principles. Prerequisite: PSY 1200. (MULTICULTURAL; CROSS-DISCIPLINARY)

PSY 3010-PSYCHOLOGY APPLIED TO TEACHING

This course provides an overview of the development of the student and an analysis of the principles of classroom learning, classroom management, and behavioral guidance. Research-based theories of child and adolescent development and major concepts, theories, and research in the acquisition of knowledge and interpersonal social skills and in the guidance and management of student behavior in the classroom are examined and critiqued. The course introduces students to research and theory on group and individual differences; various types of diversity, including characteristics of students with disabilities and students from culturally and linguistically diverse backgrounds; and foundational concepts and principles of educational assessment and accountability, including the Response to Intervention model. Applications and implications for teaching and learning are emphasized. Forty (40) hours of field experiences are required. PSY 3010 may be taken prior to or after admission to teacher education. Prerequisite or corequisite: CI 2300. (MULTICULTURAL; CROSS-DISCIPLINARY)

PSY 3100-RESEARCH METH IN PSYCHOLOGY

GEN ED: Junior Writing in the Discipline (WID)

Basic research/design concepts such as variables, confounding, causation, levels of measurement, observational research strategies, experimental design and control procedures, and use of descriptive, correlational and inferential statistics will be introduced. Students will have the opportunity to develop competence in conducting literature reviews, report writing in APA style, data collection and analysis. Lecture three hours, laboratory two hours. Prerequisites: PSY 1200, ENG 2001 or its equivalent, and STT 2810 or STT 2820 (with a grade of "C" or higher in STT 2810 or STT 2820). (WRITING; NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

PSY 3207-ORGANIZATIONAL PSYCH

A survey of organizational psychology based on classical and contemporary research. Emphasis is placed on the practical application of principles to problems at the micro (individual, interpersonal, and group) and macro (environmental) levels. Prerequisite: PSY 1200. (CROSS-DISCIPLINARY)

PSY 3210-CHILD & ADOLESCENT PSYCHOLOGY

An in-depth consideration of contemporary and classic issues and topics from child and adolescent psychology. Emphasis will be on evaluating theory and research, encouraging both understanding and critical thinking about the literature in developmental psychology.

Prerequisite or corequisite: PSY 3100 or permission of the instructor. (MULTI-CULTURAL; CROSS-DISCIPLINARY)

#### PSY 3211-PERSONALITY & INDIVIDUAL DIFF

An in-depth examination of the principles underlying personality psychology, including genetic and environmental influences in personality development. Emphases will be on understanding the measurement of dimensions of personality and the methods used

in personality psychology research by focusing on the current empirical literature. Prerequisite or corequisite: PSY 3100 or permission of the instructor.

#### PSY 3212-PSYCHOPATHOLOGY

An in-depth review of the major forms of psychopathological conditions across the lifespan.

Emphasis is placed on theory, research, and original empirical readings related to the classification, description, etiology, and treatment of maladaptive behaviors and

psychological disorders. Prerequisite or corequisite: PSY 3100 or permission of the instructor.

#### PSY 3213-SOCIAL PSYCHOLOGY

An intensive investigation of core principles in social psychology with thoughtful consideration of basic and applied research in the area as well as application to real world issues. Course will involve empirical readings related to major topical areas in the field.

Prerequisite or corequisite: PSY 3100 or permission of the instructor.

#### PSY 3214-PRINCIPLES OF LEARNING

A survey of the basic principles, mechanisms, and theories of learned behaviors. Emphasis is placed on basic learning processes associated with Pavlovian and operant conditioning discovered through research with nonhuman animals. Prerequisite or corequisite:

PSY 3100 or permission of the instructor.

#### PSY 3215-PERCEPTION

A survey of basic principles and mechanisms of perception. Visual and auditory perceptual systems are emphasized. Prerequisite or

corequisite: PSY 3100 or permission of the instructor.

#### PSY 3216-BIOLOGICAL PSYCHOLOGY

A survey of the physiological, anatomical, and chemical correlates of behavior. Topics will include basic processes associated with these course components as well as discussion of how these processes are related to various neurological disorders. Prerequisite or

corequisite: PSY 3100 or permission of the instructor. (CROSS-DISCIPLINARY)

#### PSY 3217-COGNITIVE PROCESSES

A survey of classical and modern theories of human thought processes as they relate to performance in memory tasks, concept

learning, and problem solving. Prerequisite or corequisite: PSY 3100 or permission of the instructor.

#### PSY 3218-ADULT DEVELOPMENT

An in-depth examination of development in adulthood, with coverage of physical, social, and psychological change over time. Emphasis will be on evaluating current theory and research, encouraging both understanding and critical thinking about the extant literature on the psychology of adulthood. Prerequisite or corequisite: PSY 3100 or permission of the instructor.

#### PSY 3500-INDEPENDENT STUDY

Prerequisite: PSY 1200.

PSY 3520. Instructional

#### PSY 3511-HONORS COLLOQUIUM

In depth study of selected topic(s) in psychology, encouraging independent scholarship in writing and discussion. Enrollment is by invitation of the department or by application. May be taken twice if course content is significantly different. Prerequisite: PSY 1200.  
(WRITING)

#### PSY 3512-HONORS COLLOQUIUM

In depth study of selected topic(s) in psychology, encouraging independent scholarship in writing and discussion. Enrollment is by invitation of the department or by application. May be taken twice if course content is significantly different. Prerequisite: PSY 1200.  
(WRITING)

#### PSY 3520-INSTRUCTIONAL ASST

A supervised experience in the instructional process on the university level through direct participation in a classroom situation.

Graded on an S/U basis. Prerequisites: PSY 1200, must be majoring in psychology, and junior or senior standing. May be repeated for a total credit of three semester hours.

#### PSY 3653-HEALTH PSYCHOLOGY

A survey of major physical disabilities including cardiovascular disease, diabetes, Aids, cancer, pain, obesity, eating disorders, and injury using a behavioral medicine orientation. Behavioral medicine represents a multidimensional approach to integrating behavioral and biomedical information in determining disease etiology and in prescribing comprehensive treatment. Prerequisite: PSY 1200.

#### PSY 4001-RESEARCH ASSISTANT

A supervised experience in which the student does psychological research on a faculty member's project under the direction of a faculty member. Graded on an S/U basis. Prerequisites: PSY 1200 and must be majoring in psychology. May be repeated for a total credit of six semester hours.

#### PSY 4002-SUPERVISED RESEARCH

A supervised experience in which the student does psychological research under the direction of a faculty member. The project will be developed by the student in consultation with their supervisor and should be considered the student's project. Prerequisites: PSY

1200, PSY 3100, and must be majoring in psychology. May be repeated for a total of six semester hours credit. (WRITING)

#### PSY 4206-INDUSTRIAL PSYCHOLOGY

A survey of the field of human resource management based on fundamental psychological principles and psychometric theory. Topics considered include job analysis and evaluation, performance appraisal, and personnel selection.

Prerequisites: PSY 1200 and PSY

3100 or permission of the instructor. (SPEAKING; CROSS-DISCIPLINARY)

#### PSY 4207-EVOLUTIONARY PSYCHOLOGY

This course examines how human thinking, motivation, behavior, and social relationships can be understood from the perspective

that many aspects of human behavior involve sets of processes designed by natural selection to solve adaptive problems faced by our

#### PSY 4208-FORENSIC PSYCHOLOGY

An in-depth study of the ways in which psychology and the law interact. Topics will include a

#### PSY 4211-PERSONALITY LABORATORY

1).On Demand.

Practical application of theory and empirical findings in personality psychology. Methods of personality assessment will be critically examined. Students will generate testable hypotheses and design and implement correlational and experimental research studies

informed by basic principles of personality theory. Prerequisite or corequisite: PSY 3211 or permission of the instructor.

#### PSY 4213-SOCIAL PSYCHOLOGY LABORATORY

#### PSY 4214-LEARNING LABORATORY

#### PSY 4215-PERCEPTION LABORATORY

#### PSY 4216-BIOLOGICAL PSY LABORATORY

#### PSY 4217-COGNITIVE PSYCHOLOGY LAB

#### PSY 4220-COMMUNITY PSYCHOLOGY

#### PSY 4511-SENIOR HONORS THESIS I

On Demand.Independent study and research leading to proposal of an honors thesis; directed by a member of the psychology department. The

student will register for this course during the semester prior to the final semester as an undergraduate. Enrollment by qualified

applicants only. Prerequisites: PSY 1200 and successful completion of at least one honors course. (WRITING)

#### PSY 4512-SENIOR HONORS THESIS II



On Demand.

Independent study and research leading to completion of an honors thesis; directed by a member of the psychology department.

The student will register for this course during the final semester as an undergraduate.

Enrollment by qualified applicants only.

Prerequisite: successful completion of PSY 4511. (WRITING)

PSY 4562-PSYCH OF ADULTHOOD & AGING

Overview of the Psychology of Aging, with coverage of sensory, cognitive, and socio-emotional changes relevant to applied professions.

Emphasis will be on applications of existing theory and research, and on encouraging an understanding of how to understand and

interact with adults of all ages. Prerequisite: PSY 1200. [Dual-listed with PSY 5562.] Dual-listed courses require senior standing;

juniors may enroll with permission of the department.

PSY 4640-SEMINAR IN PSYCHOLOGY

On Demand. In depth analysis and evaluation of a contemporary research issue in psychology.

Topics vary from year to year depending upon

the interests of students and faculty. Prerequisites: PSY 1200 and PSY 3100 or permission of the instructor, and must be majoring

or minoring in psychology. (WRITING)

PSY 4655-CONTEMP ISSUES IN PSYCHOLOGY

GEN ED: Capstone Experience

An investigation and discussion of psychological phenomena using scientific methodology and empirical research to evaluate causal

claims, evaluate research, assess validity and engage in critical thinking. A focus of the class will be the use of empirical research

literature, as well as oral and written assignments to improve reasoning skills in order for students to become more critical consumers

of information from both academic and popular sources. Topics will span multiple areas of psychology. Prerequisites: PSY 1200

and PSY 3100 or permission of the instructor. (WRITING; SPEAKING)

PSY 4658-HISTORY & SYSTEMS PSY

GEN ED: Capstone Experience

An analysis of the philosophical and empirical antecedents of modern psychology and the contemporary systems which emerge from

these. Prerequisites: PSY 1200 and PSY 3100 or permission of the instructor. (WRITING; SPEAKING)

PSY 4660-PSY TESTS MEASUREMENTS

An overview of the basic concepts of psychological measurements, strategies used to develop psychological tests, important legal and

ethical issues in testing and measurement, as well as relevant historical and theoretical perspectives. Students will be introduced to the

uses of psychological tests and measurements in various types of settings, such as clinical, educational, and industrial/organizational.

Prerequisite: PSY 3100 or permission of the instructor. (NUMERICAL DATA) (ND Prerequisite: passing the math placement test or

successful completion of MAT 0010.)

PSY 4700-APPLIED BEHAVIOR MNGT

An advanced study of the philosophy, principles, and procedures of applied behavior analysis and a review of selected research.

Practical, ethical, and legal constraints on behavioral interventions are considered. Research conducted in institutional, educational and home settings is emphasized. Prerequisites: PSY 1200 and PSY 3100 or permission of the instructor. (WRITING) [Dual-listed with PSY 5800.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

PSY 4900-FLD WORK APPL PSYCH

Supervised placement in a setting that provides appropriate opportunity for observing and practicing psychological skills. Among the settings in which such skills could be practiced are mental health centers, hospitals, rehabilitation centers, and departments in which personnel services are coordinated. Students must seek approval of the undergraduate internship coordinator before enrolling.

Graded on an S/U basis. Prerequisites: PSY 3100 and must be majoring in psychology, and/or approval of the undergraduate internship coordinator.

SOC 1000-THE SOCIOLOGICAL PERSPECTIVE

GEN ED: Historical and Social Perspective (Theme: "Individual and Society")

This course applies the sociological perspective to the experience of individuals within differing social contexts, ranging from

interpersonal interactions and small groups to larger organizations and the broader society.

Relationships between individuals and

their societies are examined with respect to a variety of issues, including socialization processes and cultural diversity; the nature

of gender, racial, and other social identities; and institutional settings ranging from the family to the economy and government.

Required for majors and minors. (CORE: SOCIAL SCIENCES)

SOC 1100. Social Problems in American Society (3).F;S.

SOC 1100-SOC PROB IN AMER SOC

GEN ED: Aesthetic Perspective (Theme: "Social Change Through the Arts"); Historical and Social Perspective (Theme: "Revolutions and Social Change")

A survey course which examines the major social problems in America today, such as poverty, racism, sexism, aging, militarism and war, environmental abuse, crime, mental illness, drug abuse and alcoholism. (CORE: SOCIAL SCIENCES)

SOC 1110-SOCIOLGY INTIMATE RELATIONSHPS

GEN ED: Local to Global Perspective (Theme: "Democracy and Personal Life")

Sociological perspectives and knowledge concerning intimate relationships, marriage, and family life in American society. General

topics include marriage and marital relations; the family as a social institution; intimacy and love; sex, sexuality, and sexual relations;

gender relations; singlehood; family dynamics; parenthood and child rearing; family crisis, conflict, and change; and marital separation,

divorce, and remarriage. (CORE: SOCIAL SCIENCES)

SOC 1530-SELECTED TOPICS

On Demand.

This course cannot be applied to the sociology major or minor or applied to general education requirements.

#### SOC 2700-SOCIOLOGY OF SPORT

This course examines the social significance of sport. Attention will focus on sport as an institution, social process, and its relation to social organization, race, gender, class, and major institutions such as family, education, mass media, government and economics.

Students will be provided with an understanding of the impact of sport on culture and vice versa. (CORE: SOCIAL SCIENCES)

#### SOC 3100-GERONTOLOGY

This course will provide a broad overview of the physical, psychological, social, and cultural aspects of aging. Major concepts, issues, and current research on aging will be analyzed, and current and proposed federal, state, and local programs impacting on the aged will be examined.

#### SOC 3550-SOC OF WORK & ORGANIZATIONS

An examination of the social context of work and related organizations, including issues pertaining to job satisfaction, organizational structure and dynamics, managerial strategies and leadership, and the nature of occupations and professions. The impact of contemporary social transformations such as labor force diversity, technological development, and economic globalization are also analyzed. (CROSS-DISCIPLINARY)

#### SOC 3600-MEDICAL SOCIOLOGY

A study of health care, medical settings, and the medical professions. Includes the creation and epidemiology of disease and illness, the structure of the health care industry, doctor-patient interaction, and major health care problems. (WRITING)

#### SOC 3710-SOCIOLOGY APPALACHIAN COMNTIES

GEN ED: Historical and Social Perspective (Theme: "Appalachia: Life, Culture, and Land")

This course examines Appalachian communities from the sociological perspective, with a focus on how the region gives rise to a unique configuration of cultural, institutional, and other social practices. Specific attention is also given to the differences between urban and rural Appalachian communities, as well as the complex relationships Appalachia has with the broader component of American society.

#### SOC 3750-PROPAGANDA, MEDIA & SOCIETY

This course will focus on the processes and effects of mass media in the United States from a sociological perspective. It will analyze the effect of the media on human groups and behavior and how media interacts with social organizations such as family, education, and government. The historical development of the media as it relates to socialization patterns and racial and sexual diversity will be explored and the media's function as a means of propaganda in the U.S. will be analyzed.

#### SOC 3800-SOCIOLOGY OF WAR

A study of the sociological effects of war on individuals, families, and communities. Topics that are covered include military conscription and the draft, the role of minorities in the military, pro-war and anti-war movements, readjustment problems of veterans, war crimes, the portrayal of war in film and music, ethnocentrism and cultural differences, general causes of war and conflict resolution.

#### SOC 4350-CONSTRUCTING BODIES SEXUALITIES

This course examines the social construction of bodies and the way in which those constructions inform our conceptions of sexuality and procreation. In addition, the course examines how research on sexuality and sexual orientation is conducted and the unique ethical concerns and methodological challenges in researching sexuality. Social policies relevant to bodies and sexualities are also covered. Prerequisite: SOC 2850.

#### SOC 4390-APPLIED SOCIOLOGY SEMINAR

This course is REQUIRED prior to taking SOC 4900 (Internship). Topics include: (1) an introduction to applied sociology, (2) the history, value and rationale of experiential learning, (3) personal values discovery and skills assessment, (4) exploring career options requiring sociological skills, (5) developing job seeking skills and preparing for an internship, (6) learning to turn academic education into job transferable skills, and (7) applying sociological skills in the work environment. Prerequisite: six semester hours in sociology, including SOC 1000.

#### SOC 4560-RACE & MINORITY RELATIONS

GEN ED: Historical and Social Perspective (Theme: "Cultural Diversity")

Examination of intergroup relations, including racial, ethnic, and women's issues; the bases of conflict, accommodation, and assimilation; the nature and consequences of prejudice and discrimination; evaluation of proposals for reduction or elimination of prejudice and discrimination. (MULTI-CULTURAL) [Dual-listed with SOC 5560.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### SOC 4750-SOCIAL STRATIFICATION

A study of the distribution of wealth, power, privilege, and prestige. The course examines conservative, liberal, and radical explanations of human inequality. Cross-cultural and comparative analysis is used to focus on various problems of inequality and their consequences. (MULTI-CULTURAL) [Dual-listed with SOC 5750.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### SOC 4800-SOCIOLOGY OF THE FAMILY

The origin and development of the family as a social institution; the contemporary family in various cultures; the relationship of the family to the economic, political, religious, and educational institutions in American society. Prerequisite (for undergraduates): SOC 1110. [Dual-listed with SOC 5800.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### SOC 4850-GLOBALIZATION & POPULATION

On Demand.

This course examines how worldwide changes have given rise to global organizations, global inequities and some environmental degradation. Special emphasis is placed on how the population dynamics of fertility, mortality and migration underlie many global issues and create new conflicts. [Dual-listed with SOC 5950.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

WGC 1103-INVESTIGATIONS: LOCAL

GEN ED: First Year Seminar and First Year Writing

An experiential, interdisciplinary study in the humanities and social sciences of significant local issues (historical, economic, social, cultural, ideological, aesthetic) and their relationships with regional, national, and global issues.

WGC 1104-INVESTIGATIONS: GLOBAL

GEN ED: Local to Global Perspective

An experiential, interdisciplinary study in the humanities and social sciences of significant global issues (historical, economic, social, cultural, ideological, aesthetic) and their relationships with local, regional, and national issues.

WGC 3664-CREATIVE WRT: BLCK MTN COLLEGE

A course in the writing of creative non-fiction, with emphasis on site-based and archival research, personal interviews, and visual documentation. Assignments will include written work, oral presentations, workshop evaluations, and weekend, on-site visits to Black Mountain College and other relevant locations.

BUS 2000-BUS PROF LEADRSHP & CAREER DEV

CIS 1026-PERS COMPUTING EFFECTIVENESS

This course provides a basic understanding of current information technologies used in business, and enhances the use of the most common computer-based applications for personal, academic, and professional goals. Upon successful completion of this course, students should be able to use application software such as Microsoft Office to make better decisions and improve their individual skills. Other topics covered include the use of other information technologies including collaboration and communication tools, emerging technologies and digital media, and security. This course is designed for the user with little experience using computer software.

CIS 2050-INFO TECHNOLOGY IN ORGANIZATN

This course is designed to introduce students to the impacts of computer information systems on the firm, industry, society, and the economy. Students will study issues relating to the design, implementation, use, and control of computer-based information systems. Additionally, students will analyze the role of information systems in reaching organizational objectives including communication, collaboration, performance improvement and strategy implementation. Skill-based learning will reinforce strategic information systems concepts.

CIS 3250-SYSTEM ANALYSIS AND DESIGN

This course provides a comprehensive introduction to the strategies and technologies for building information systems in organizations. Course includes planning and discovery, fact finding analysis using techniques such as joint application development (JAD), information systems modeling, use of CASE technologies and current development methods including prototyping, rapid application development and agile development. Project management tools will be used to create work plans and coordinate activities to achieve desired results for the design of a system.

#### CIS 3580-NTWRK & IT INFRASTRUCTURES

This course introduces students to the processes of selecting, modeling, configuring, and maintaining the components of a company's IT infrastructure. The newest hardware components, networking devices, and security issues will be examined through both individual and group projects.

#### CIS 3610-PROJECT MANAGEMENT

This introductory course will prepare the student for the practice of professional project management. Students will plan and manage projects through the use of hands-on experiences, case studies and computer-based project management tools. Students will address many important issues such as: estimation, scheduling, budgeting, version control, progress tracking, change, risk and crisis management, resource management, motivation, and leadership.

#### CIS 3620-GLOBAL INFO TECHNOLOGIES

This course presents students with the concepts and issues inherent in global information technology. The course examines the issues associated with using technology in a global environment, how global systems are developed, how culture, language, etc. impact systems and their development, outsourcing, strategies for global systems development and use, and issues facing Far East, European, Latin America, and Third World countries.

#### CIS 3710-EMERGING INFORMATION TECHNOLOG

This class is designed for students with an interest in technology and its various applications not only in the business realm, but also in society at large. Topics of study will range from technologies that are highly specialized to certain industries or segments of the population to those that are highly mainstream. Students will evaluate the validity of new technologies, the "shelf-life" of these technologies and impacts on industry and society. The student will use mobile technologies and learn to program mobile devices.

#### CIS 3720-ENTERPRISE SYSTEMS

#### CIS 3750-DATABASE MANAGEMENT

This course teaches students how to use data to stay competitive in a changing business environment. Topics include building, modeling and administering a database, data warehousing, data mining, XML and data integration, data security, as well as ethical and legal issues surrounding the use of data in our modern society. Microsoft Access will be one of the primary database toolsets used in this course with an exposure to one or more enterprise database toolsets (Oracle, Microsoft SQL Server, MySQL, etc.). Onethird of the course will be dedicated to database queries.

#### CIS 3820-ETHICS & PRIVACY

This course will examine how information systems impact both individuals and organizations. Cultural, ethical, moral, human interaction, privacy, security, and relationship issues will be analyzed and discussed through the use of case studies and papers. The focus of this course will be on the ethical and privacy issues related to security enhancement and the growing use of the Internet.

#### CIS 3840-MANAGING SECURITY

This course is designed as a broad overview of important security topics that are relevant to people and businesses. Relevant areas of security that will be studied include: the need for security on a personal and business level; the management practices surrounding security issues; network security strategies; human factors; access controls; firewalls; disaster recovery plans; cryptography; and forensics issues.

#### CIS 3870-WEB DEVELOP & ECOMMERCE

This course focuses on the technology that every leading organization needs to build effective Internet sites, promote Internet presence, secure sites and data, interface with other corporate applications, perform online business transactions, and compete in e-commerce. Current and emerging Internet technologies will be covered. Students will create Web sites and link them to other applications (databases), and will learn how to protect sites and transactional data from theft or privacy intrusions. Students will also understand the basic principles of e-commerce and how technology can promote online competitive advantage.

#### CIS 4585-ADV DATA COMM & NETWORKING

This course is a continuation of CIS 3580 and explores advanced topics in data communications and networking. Topics include, but are not limited to, communications middleware, LAN application software, network design, internetworking technologies and design, and network security policy.

#### CIS 4620-IS STRATEGY AND ETHICS

This course examines how to effectively lead an information systems organization. Chief Information Officers are tasked to take part in determining corporate strategy based on information technology and its potential role in corporate objectives—while determining the IS (Information System) strategy to most effectively implement the corporate strategy in terms of information technology, IS personnel, data, and telecommunications. That IS strategy focus of this course will be on the ethical and privacy issues related to security enhancement and the growing use of the Internet. IS governance will include personnel issues, legal and financial obligations, data privacy and security, vendor relations, and business unit liaison. This course will also examine how information systems impact both individuals and organizations. Cultural, ethical, moral, human interaction, privacy, security, and relationship issues will be analyzed; ethical and privacy issues related to security enhancement and the growing use of the Internet will be examined.

#### CIS 4630-ADV DATA MGMT WITH ORACLE

Students will have the opportunity to learn database development techniques using Oracle products including database, designer and developer. Data mining is a broad area dealing with the analysis of large volumes of data that integrates techniques from several fields including machine learning, statistics, pattern recognition, artificial intelligence, and database systems. Data mining is a rapidly growing field that supports decision-making by detecting patterns, devising rules, identifying new decision alternatives and making predictions about the future. The course objective is to present the leading data management techniques using Oracle and their applications to real-world problems. The course is organized around a number of well-defined data mining tasks such as description, classifications, estimation, predictions, and affinity grouping and clustering. The topics covered include: introduction to knowledge discovery in the databases (KDD), statistical methods, emerging modeling techniques such as neural networks, and others.

#### CIS 4685-OBJ-ORIENTED PROGRAM WITH JAVA

This course will introduce the student to object-oriented (OO) methodologies including modeling using OO CASE tools, encapsulation, polymorphism, and inheritance. Students will have the opportunity to learn programming techniques in Java, program documentation, classes and methods, loops, arrays, streams, exception handling, file I/O, dynamic data structures, recursion and building applets.

#### CIS 4710-E-BUSINESS SYSTEMS

This seminar course discusses e-business issues that are current, applicable, relevant, and interesting. Students are expected to develop and execute a team project throughout the course. Relevant areas of e-business studied will include: electronic commerce, personalization management systems, content management systems, customer relations management systems, and community systems. This course ties together concepts from different areas of management and the economic, behavioral, functional and technical aspects of information systems.

#### CIS 4790-CURR TOPICS INFORM SYS

Advanced topics in the field of information systems will be studied. These topics may include but are not limited to advanced topics in data communications and networking, distributed processing systems, 4th generation languages, CASE tools, DSS and expert systems, and/or managing information technology.

#### CIS 4840-ADVANCED SECURITY

This course is designed for the student to gain a deeper knowledge in the area of information security. Topics to be included, but are not limited to: network defense fundamentals; hardening various operating systems; wireless network security; intrusion detection systems; designing and configuring firewalls; creating security policies; and ethical hacking concepts and techniques.

#### CIS 4850-INFORMATION SYSTEM PROJECT

Using a team concept, students will analyze, design, create, and implement a working information system for a public or private organization. Emphasis will be placed on project management, rapid application development, and the development of quality systems for clients.

#### POM 4564-TOTAL QUALITY MANAGEMENT

Total quality management is an integrative management concept for continuously improving the total quality of goods and services through the participation of all levels and functions of the organization. TQM incorporates several dimensions: the design of products/services to meet customers' needs, control of processes to ensure their ability to meet design requirements, and continued enhancement of quality. The course will cover topics such as quality systems, the management system for quality, quality of conformance, human resource management for quality, statistical quality control, quality assurance, measurements, and reliability.

#### SCM 3660-SUPPLY CHAIN MANAGEMENT

The objective of the course is to enable students to understand the concept of supply chain management and its importance in both strategic and operational planning. Topics covered include the intra-company relationships between operations and other organizational functions as well as the inter-company relationships among suppliers, products, distributors, retailers and consumers in the supply chain. The course will also discuss the problems and issues confronting supply chain managers, and the concepts, models, and techniques they use to solve those problems.

#### SCM 3670-SIX SIGMA & QUALITY MGMT



This course will cover topics on the quality system, quality conformance, the management system for quality, the Six Sigma system, organizing for Six Sigma, selecting winning Six Sigma projects, leading a Six Sigma project team, and the Six Sigma tool kit. Also, the course will discuss several methods for Six Sigma and quality management including quality assurance, measurement, reliability, process control charts, and sampling techniques. In order to understand the real life applications of quality management, various real-world cases will be discussed.

#### SCM 3680-SUPPLY CHAIN TECH GLOBAL ENVIR

This course is designed to give students the opportunity to learn the technologies that are commonly used in the supply chain. These enabling technologies include Extensible Markup Language (XML), Web Services, and others. The course will cover concepts and technologies used in supply chain and distribution channels, enterprise resource planning (ERP), customer relationship management (CRM), and supplier relationship management (SRM) systems.

#### SCM 3690-GLOBL SUPPLY CHAIN & LOGISTICS

This course incorporates principles and models of logistics in the global supply chain environment. Topics include the structure and dynamics of the global supply chain environment, global sourcing, global facility location, import-export issues, demand management, materials management, warehousing, and performance measurement.

#### SCM 4870-ANALYTICAL MODELS FOR SCM

Analytical models for supply chain management focuses on the applications and development of modeling tools for the supply chain. This course introduces students to important supply chain problems and solution methodologies including optimization, simulation, and other analytical methods. The objective of the course is to develop valuable modeling skills that students can appreciate and use effectively in their careers.

#### ECO 1010-SURV CURRENT ECO ISSUES

Application of basic economic concepts in the analysis of current issues such as: unemployment, inflation, energy, pollution, poverty, government regulation, etc.

#### ECO 2030-PRINCIPLES OF MICROECONOMICS

A brief introduction to the study of economics followed by an in-depth analysis of microeconomics, including: the price mechanism and supply and demand analysis; consumer choice; cost and revenue analysis of the firm; market structures; factor markets and income distribution; market failure and the role of government; and current economic problems such as pollution, poverty and discrimination.

#### ECO 2040-PRINCIPLES OF MACROECONOMICS

An in-depth analysis of macroeconomics including: aggregate economic measures; aggregate supply and demand analysis; economic fluctuations and growth; money, banking and credit; stabilization policy; problems such as unemployment, inflation and budget and trade deficits; and international trade and finance.

#### ECO 2620-ENVIRNMTL/RESOURCE ECONOMICS

The course explores the efficient allocation of environmental and natural resources and examines the continuing conflict between economic activity and environmental quality and the conservation of natural resources. The course applies economic theory to local, regional, national, and international environmental issues.

#### ECO 3410-INTERNATIONAL ECONOMICS

A survey of the theory, development, and practice of the international trade and payments system. Special attention is given to the basic concepts and different mechanisms which have been and are used in international economic affairs, as well as to governmental policies and domestic and international institutions regulating them.

#### ECO 3430-ECONOMIC GROWTH & DEVELOPMENT

The course explores forces contributing to or retarding economic progress in developing countries, and it also focuses on the central questions of economic growth, including sources of income differences across countries, the causes of long-run growth, the linkages between trade and growth, and the process of economic development, including the role of institutions.

#### ECO 3610-ECON OF HEALTH CARE

Economic theory is applied to the health care industry. Included is an overall perspective of the health care industry, identification of the factors influencing the demand for and the supply of health care; identification of some costs and benefits of health programs, hospital organization and efficiency, and a consideration of alternative methods of financing health care.

#### ECO 3800-URBAN & REGIONAL ECON

An examination of the institutional background necessary for urban and regional growth. An introduction to theoretical models of growth

#### ECO 4621-ENVIRON ECONOMICS & POLICY

Analysis of the interrelationships among economic activity, government policies, and the environment; the benefits and costs of economic growth; the economics of environmental quality; the social costs of pollution; and the intertemporal allocation of natural resources.

#### ECO 4640-INTERNATIONAL MACROECONOMICS

This course examines several issues pertaining to trade between countries. Topics covered may include tariffs and non-tariff barriers, regional trading blocs, foreign direct investment, trade and environment issues, balance of payments, and exchange rates.

#### ECO 4660-BENEFIT-COST ANALYSIS

The study of the evaluation of competing public policy alternatives. The purpose of benefit-cost analysis is to inform government decision-making and facilitate the more efficient allocation of scarce resources. This course introduces the basic theory and principles of benefit-cost analysis and examines applications of the methodology.

#### ECO 4810-SEMINAR IN ECONOMICS

In-depth research and analysis of selected economic issues and problems. Required of all seniors majoring in economics or banking. Students participate in discussions of significant economic problems, theories and policies. Preparation of empirical papers that apply theoretical models and quantitative methods is required.

#### FIN 2860-PERSONAL FINANCE

A study of the key concepts, tools, and techniques of personal financial management. Focus is placed on the financial statements of the individual. The balance sheet model includes a discussion of personal assets - both financial and non-financial, personal liabilities including all types of loans, and personal net worth. The implications of the current financial environment (i.e., changing tax laws, savings instruments, interest rates, etc.) is also considered from the standpoint of the individual.

#### FIN 3030-PERSONAL FINANCIAL MANAGEMENT

This course provides a study of the key concepts and tools that are necessary to help students manage their personal finances and help them avoid financial difficulties as they transition from college life to their professional careers. Topics covered include budgeting, saving for financial emergencies and major purchases, investing for the future, retirement planning, selecting the appropriate investment instruments, use of insurance, and personal debt management. Other topics related to the current financial environment and their impact on personal financial management may be covered. This course is designed for non-Finance and Banking and non-Risk Management and Insurance majors.

#### FIN 3600-PERSONAL INSURANCE

#### LAW 3930-HOSPITALITY LAW

Laws applicable to ownership and operation of hotels, restaurants and resorts. Consideration of contracts, real property, ownership forms, torts, liabilities, duties and administrative agency regulations.

#### HOS 2000-SUR HOSP & TOURISM INDUS

A survey of the history, trends, organizational structure, and economic impact of the hospitality and tourism industry on the national economy. Some study of the problems originating in the operation and management of various segments of the hospitality industry will be introduced.

#### HOS 3700-HOSP MGT OPERATIONS I

This course involves the concepts and applications of management in food and beverage operations in various types of hospitality firms. Topics such as menu development, beverage management, catering, service, sanitation, foodservice design, and cost controls will be presented. Management approaches will be developed to provide quality products and services.

#### HOS 3800-HOSP MGT OPERATIONS II

This course is designed to provide the student with knowledge of lodging operations, which include hotels, cruise ships, and resorts. Lodging operations will be analyzed from a systems perspective, with particular focus on operational standards, and technology. Case studies will be presented to illustrate issues and problems of operations and functional areas of properties such as marketing, rooms division, engineering, accounting, computer applications, and guest security.

#### HOS 3900-HOSPITALITY MGT INTERN

A structured learning experience in a service corporation, designed to prepare the student intern for a professional management career. Ten weeks full-time employment (400 hours) are required. No additional courses may be scheduled while completing an internship. Should be taken during the summer term between the junior and senior years and not during the final semester term of study. Students desiring to take internships must obtain approval in advance from the faculty advisor. A research or topical paper related to the company will be required. Each student will be evaluated on her/his completion of goals previously set by the student, faculty advisor, and company field supervisor. Prerequisites: HOS 2000 and permission of faculty advisors, and a minimum of 9 hours completed in the major.

#### HOS 4040-DESTINATION MANAGEMENT

The course will introduce the various issues associated with the management of a convention visitors bureau (CVB). The course will analyze the mission, structure, and business activities of organizations that develop and promote a complex tourism destination. This includes the management functions of membership services, visitor services, financial and marketing concerns, research activities, and the strategic planning and evaluation of these efforts. Topics covered will include developing the following consumer segments; meetings/conventions, pleasure/tours, and festivals/special events. Students will be required to give two class presentations during the semester on the above topics.

#### MGT 3010-SURVEY OF MANAGEMENT

An introduction to traditional and contemporary functions and concerns of management, including the history of management; planning, organizing, and controlling; decision-making fundamentals; information systems; motivation, communication, and leadership; international management; and social responsibilities of management.

#### MGT 3170-CREATIVITY AND DESIGN

Fostering and managing creativity can affect all aspects of an organization, including strategy, sustainability, and interaction with customers, suppliers and competitors. The purpose of this course is for students to learn how to develop and manage creativity in organizations. Students will have the opportunity to study the nature and significance of creativity, develop a more creative mindset, and learn about the principles, practices and tools to foster and use creativity.

MGT 3300-SUSTAINBLE BUS-THEORY&PRACTICE

MGT 3400-CHANGE MANAGEMENT

MGT 3600-ENTREPRENEURSHIP STUDY ABROAD

MGT 3620-HUMAN RESOURCE MANAGEMNT

A study of basic personnel policies, practices, objectives, functions and the organization of personnel programs. Emphasis is placed on recruiting, selection, placement, training and development, employee evaluation, compensation, accident prevention, and union management relations in a modern business corporation.

MGT 3650-SOCIAL ENTREPRENEURSHIP

A study of the opportunities and challenges of using entrepreneurship skills to craft innovative responses to social problems. This course offers a survey of the field of social entrepreneurship, including an exploration of the players and business structures used by social entrepreneurs, and the mechanics, tensions, and realities of starting and/or managing a social enterprise.

MGT 3660-NEGOTIATION CONFL RESOLUTION

A study of negotiation in a variety of settings that business and professional people are likely to encounter. Negotiation is both a science and an art. Students will have the opportunity to learn about the science of negotiation through readings, lectures, and discussions; and will practice the art of negotiation through a variety of exercises or dynamic cases. The course is designed to complement the diagnostic and technical skills that students typically learn in other courses.

While managers need analytical skills to determine the optimal solutions to problems, negotiation skills are often necessary to see those solutions implemented.

MGT 3670-INT'L HUMAN RESOURCE MGMT

A study of human resource management with emphasis on the global economy. Topics will include human resource practices of multinational firms involved in international strategic alliances, joint ventures, and cross-border mergers and acquisitions. Attention will be given to managing expatriate assignments in terms of selection, preparation, retention, and inter-cultural adjustment. Additional topics will include managing host country nationals on their own soil and immigrant workers on U.S. domestic soil.

MGT 4570-COMPENSATION

This course presents practical tools, methods, and a systems perspective to help advance students' understanding of human resource management. The course covers compensation, benefits and related human resource functions such as performance appraisal, job analysis and selection practices.

MGT 4630-LABOR RELATIONS

A study of labor-management relations with emphasis on management's relations with organized labor. Lecture, discussion and cases are used to study the reasons employees join unions, the laws that apply, and the process of working out a labor contract after it is negotiated.

MGT 4640-INTEGRATIVE CASES HR MGMT

The course is intended as the senior level integrative course in the Human Resource Management concentration under the B.S.B.A. degree in Management. It is designed to expose those enrolled to the "big picture," the intersection of human resource management, business policy, and competitive strategy. It is about human resource management from a strategic perspective. The goal will be to introduce young professionals to the core competency areas that will be needed to be successful managers of human capital, whether within the human resource function, some support area, or as a line manager.

#### MGT 4700-CONTEMP ISSUES MGT & LDRSH

This course is designed to explore theories and practical applications of management and leadership in organizational settings. The major emphasis is on building the managerial and leadership skills necessary to diagnose and provide remedies for organizational level problems. Subjects covered include: management, leadership, strategic vision, organizational culture and values, motivation and empowerment, teams, leading diversity, and leading organizational change.

#### MGT 4750-STRATEGIC MANAGEMENT

Integrates and draws upon knowledge gained in the core business disciplines to develop a holistic perspective of organizations competing in dynamic domestic and global environments. The course engages students in understanding how organizations identify and create new opportunities to sustain a competitive advantage. Emphasis is placed on acquiring and demonstrating analytical skills needed to implement successful strategies.

#### MGT 4770-BUSINESS ETHICS

A study of the economic, political, social and legal environments within which business processes take place and how such environments affect the decisions that businesses and managers make. Prerequisite: a minimum grade of "C" in any Writing in the Discipline (WID) course.

#### MKT 3050-PRINCIPLES OF MARKETING

An introductory study of the marketing process in advanced market economies. Consideration of psychological theories and determinants of buyer behavior. A background in the elements of the marketing mix; the product distribution structure, the price system, and promotional activities. Survey of marketing in special fields. Planning and evaluating the marketing effort. Using computers to analyze marketing data; quantitative aspects of the marketing function.

#### MKT 3230-BUS-TO-BUS MARKETING

A study of the distinguishing features of the business marketing environment including the major types of customers, the nature of the procurement function, and forces that drive buying decisions in organizations. Other topics include customer relationship management strategies for business markets, E-commerce strategies for business markets, supply chain management and global business marketing strategies. In addition, techniques for assessing business market opportunities, market segmentation, demand analysis and sales forecasting will be reviewed. Also included will be the planning, implementation and control of the business marketing function.

#### MKT 3240-INTEGRATED MKT COMMUNIC

Intensive investigation of the field of advertising to include a review of the history and the economics of advertising, research, copy, layout, production, budgeting, and advertising organization. Theory and application are stressed.

#### MKT 3260-MANAGING DISTRIBUTION CHANNELS

#### MKT 4610-CONSUMER BEHAVIOR

An examination of the psychological, sociological, and economic theories of buyer behavior. This is followed by analysis of the major current and classical empirical research studies designed to test the different theories of buyer behavior.

**B E 1590-PERSONAL MONEY MGT**

Planning and managing personal finances. Emphasis is placed on controlling expenditures, consumption, emergencies, borrowing, insurance, home ownership, taxes, savings, investing, retirement, and personal estate planning.

**B E 3340-BUSINESS COMMUNICATIONS**

Students gain experience in written and spoken business communications. Activities include writing e-mail, memoranda, letters, proposals, and reports. Oral, nonverbal, and intercultural communications are emphasized.

**B E 4510-OFFICE MANAGEMENT**

Study of the responsibilities, problems, and duties of the office manager approached from a management viewpoint; study made in managing the modern office from both a traditional and computerized office systems approach; study of administering systems and procedures in office work and expansion of knowledge and techniques used to reduce and control office costs.

**B E 4660-CLSRM MGT & ASSMNT PRACT SE**

Provides opportunities for students to study, observe, and participate in using performance assessment and classroom management strategies in public schools. Reflection, analysis and discussion of practicum experiences are integrated into regularly scheduled seminar classes. Emphasis is placed on: multiple assessment strategies, including portfolio assessment; making and documenting classroom management decisions; taking action and communicating these actions to students and parents; and becoming a reflective practitioner.

**B E 4755-METH & MAT IN BUS & MKT EDUC**

This course will provide students with opportunities to acquire knowledge and skills needed to effectively teach business and marketing education courses in school settings. It places emphasis in the following areas of study: lesson and unit plans, assessment, curriculum, teaching strategies, and delivery of lessons. This course also incorporates the history of CTE, legislation affecting business and marketing education, and CTE student organization and work-based learning programs.

**B E 4850-MGT OCCUP ED YOUTH ORG**

A study of how to organize and administer youth organizations in occupational business and marketing education for teachers in order to establish an excellent learning situation.

**C I 3000-LEARNER DIV:TCH ENG LANG LRN**

This course examines current literature and instructional practices related to working with English language learners (ELLs) in mainstream classrooms, especially in the areas of understanding cultural differences, and developing language and content learning. Emphasis is placed on developing positive dispositions towards and empathy for the challenges faced by linguistically diverse students and their families. Instructional strategies and interventions will be observed, modeled, discussed, and analyzed. Coursework is integrated with K-6 field experiences to provide real-world contexts for classroom instruction and discussion.

**C I 3060-SOC STUDIES IN MID GRADE**

This course focuses on the comprehensive study of social studies, instructional strategies, resource materials, the North Carolina Standard Course of Study, national standards, and the assessment of student learning. Other key topics include: using technology, changing demographics, integrative curriculum and instruction, and community service.

**C I 3090-TCHG H S SCIENCE**

Students will have 30 hours of teamed experience in public school classrooms in addition to class. It is strongly advised that all other requirements for licensure (except student teaching) be completed prior to the methods course.

#### C I 3100-TCHG H S SOCIAL STUDIES

National, state, and program standards for the social studies, current research in social studies education, social studies content, and knowledge and abilities of the learner are used to build lessons and units in social studies. Constructing knowledge, understanding major social studies concepts, and developing skills based on the North Carolina Standard Course of Study are emphasized. Major topics include selecting materials and resources, instructional strategies, applying technology, assessing learning, and classroom management. Includes a 45-hour internship in a regional high school.

#### C I 3110-SOCIAL STUDIES ELEM SCH

National, state, and program standards for the social studies, current research in social studies education, social studies content, and knowledge of the learner are used to build lessons and units in social studies. Constructing knowledge, understanding major social studies concepts, developing skills, and connecting social studies to the broader elementary curriculum is emphasized. Major topics include selecting materials and resources, instructional strategies, applying technology, integration with other subjects, and assessing learning.

#### C I 3120-TCHG LANGUAGES:THEORY & PRACT

A study of methods, instructional strategies, organization and administration for teaching second languages in the K-12 curriculum, designed to allow students to meet Standards for Second Language Teachers as defined by the NC State Board of Education. Experiences will include development of unit and lesson plans, classroom observations, and micro-teaching. It is strongly advised that other requirements for licensure (except student teaching) be completed prior to taking this course.

#### C I 3142-LANG & LIT IN ELEM SCHL

A study of communication skills in the elementary school curriculum with emphasis on language arts and children's literature.

#### C I 3551-TEACHER, LEADER, CITIZEN

The purpose of this course is to prepare pre-service teachers for their roles as civic leaders, educational leaders, and role models in their classrooms. Through a series of readings, class discussions, and service activities, future teachers will be encouraged to play an active role in their society and local community.

#### C I 3552-ENVIRONMNTL LITERCY 21 CENTURY

This course focuses on developing field-based instructional strategies for integrating current science and real-life scientific problem solving with the range of curricula covered by the North Carolina Standard Course of Study. During the course, preservice teachers will explore multi-faceted ecological issues in their community, developing teaching approaches that bring together science content with math, technology, literacy, and social studies tools.

#### C I 3553-ISSUES LANG CULT IN PUB SCHLS

This course examines the concepts of language and culture and their relationships to teaching and learning in U.S. public schools. Students will develop an understanding of the history of linguistic diversity and language education in the U.S., theoretical foundations of the relationship between language, culture, and identity, as well as how immigration influences the cultural and linguistic diversity of schools. Through the use of case studies in the second half of the course, students will develop applied knowledge of how these issues interact in public school settings.

#### C I 3554-INVEST PAST PRESENT EXP CHILD

Students will strengthen their own content knowledge as well as develop perspectives on events children and young adolescents have experienced in the past and the present. Students will explore and compare experiences of how children around the world lived in the past and how children live today. Using children's literature, primary and secondary sources, and current events, students will investigate the resilience of young people experiencing war, oppression, natural disaster, and other hardships both in the past and in the present. Students will conduct a service project directed toward children who are experiencing major challenges such as social injustice, poverty, or natural disaster.

#### C I 3555-SEEING WORLD THRU MATHEMATICS

Using the lens of mathematics, students construct a comprehensive understanding of their world. Students will investigate what it means to be a global society and what responsibilities they hold as members. The course will examine current social issues, defining the issues and using numbers to paint a concise picture.

#### C I 3556-CHILDREN AT RISK

This course provides information and research about at-risk conditions that affect the success of children in the public schools. The academic and nonacademic indicators that predispose students for being at risk will be examined. Students will have the opportunity to learn strategies for working with children in challenging situations, especially those associated with poverty.

#### C I 3920-TEACHING YOUNG ADOLESCENTS

Prospective middle grades teachers will have the opportunity to learn about the educational implications of the developmental period of early adolescence. The course focuses on applying what is known about young adolescents to models of effective middle grades teaching, learning, and schooling. Particular attention is paid to issues of ethnicity, race, gender, class, and ability and how these factors influence the developmental needs of young adolescents. The role of middle grades teachers in working with family and community members is also emphasized.

#### C I 4300-LIT, LANG & CULT M GR EDUC

Prospective middle grades teachers will have the opportunity to learn about the foundational and current issues and methods of instruction regarding literacy education at the middle grades level. Emphasis is placed on the politics of language and identity, socio-cultural contexts for adolescent literacy development, diverse literacy learners, and effective instructional strategies. Students enrolled in the course learn to assess students' literacy needs and acquire knowledge of a range of practices that support the literacy development of young adolescents. Prospective middle grades teachers will work with cooperating public school teachers to plan and implement literacy strategies and assessments in middle grades classrooms.

#### C I 4401-MTHDS OF ELEM SCIENCE TCHNG

This course focuses on developing instructional strategies for teaching science content as a means for achieving scientific literacy in the 21st century. A broad range of science content will be explored in the context of the North Carolina Standard Course of Study (NCSCOS) strands: Nature of Science, Science as Inquiry, Science and Technology, and Science in Personal and Social Perspectives. Students will be exposed to a variety of science teaching models with an emphasis on social constructivism and integrated instruction in a community context.

#### C I 4810-INTRO TO SIGHT & SOUND



An introduction to the basic knowledge and skills underlying any effective audiovisual presentation. Students will have the opportunity to learn the aural and visual aesthetic principles involved in the creation of effective media presentations. They will also have the opportunity to learn the theory and operation of various common sight and sound devices, including audio tape recorders; microphones and mixers; still cameras; video cameras, monitors, and recording devices; projection devices and presentation systems. Emphasis will be placed not only on understanding how the equipment works, but on the common theoretical background shared by all these communication devices.

#### C I 4825-NON-FICTION FILM AND VIDEO

Students view and analyze a variety of non-fiction films and videos in terms of both form and content. Emphasis is placed on understanding the wide range of purposes for which non-fiction programs are made, and on examining the variety of techniques used to achieve those purposes. Students also engage in some hands-on experiences attempting to capture reality on videotape as part of an effort to explore what happens to reality when it is shaped into a film or video.

#### C I 4830-MEDIA LITERACY

The course examines what it means to be literate in a media era. Key concepts and principles from the field of media literacy are studied through an examination of motion pictures, advertising, television, photo journalism, broadcast news, and the Internet. Emphasis is placed upon understanding media texts, media industries, media narratives, and the form and language of a variety of different media. Students are provided with critical frameworks for analyzing media as well as with tools and techniques to be applied in several class projects aimed at deconstructing media messages.

#### C I 4860-AUDIO DOCUMENTARY PRODUCTION

In this course, students listen to and analyze a variety of non-fiction audio programs in terms of both form and content. Emphasis is placed on understanding the wide range of purposes for which non-fiction programs are made, and on examining the variety of techniques used to achieve those purposes. The class will explore the advantages and disadvantages of creating and distributing documentaries in an audio format. Students also engage in some hands-on experiences creating sound documentaries using a variety of digital audio hardware and software. The short audio documentaries produced by each member of the class will be podcast.

#### HED 1000-PERSONAL AND FAMILY HEALTH

This introductory course is tailored to meet the needs of college students and the distinct health and behavioral issues that they face in a college environment. Emphases will be placed on developing communication, decision-making and goal-setting skills in the areas of sexual health, alcohol, tobacco and other drug choices, physical activity and diet, as well as improving psychological health.

#### HED 2100-INTRO TO HEALTH EDUCAT

This course focuses on the discipline of health education, its foundation in theories of behavior change and prevention of health risks. The roles and competencies of health educators in schools, community, and clinical and worksite settings are described. Skills of needs assessment and community analysis are introduced. The Health Belief Model and models of diffusion, adoption and epidemiology are studied.

#### HED 3120-CONSUMER HEALTH EDUC

An overview of health products and services. Analysis will be made of the health care delivery system and wise decision making in the health marketplace. Included is the study of alternative healing practices, advertising of health products, and financing of health care from the consumer's perspective. The role of the FDA and FTC and other consumer protective agencies will be studied.

#### HED 3450-SCHOOL HEALTH PROGRAMS

An examination of the three components of the school health program: comprehensive health education, school health services and a healthful school environment. This course describes the roles and functions of the health educator and coordinator in planning, implementing and evaluating programs which promote the health and well-being of school-aged children and youth. Coordination of efforts between the school, family and community are emphasized.

#### HED 3645-HLTH EDUC IN ELEM SCHL

An introduction to the content and methods of health education. The course will survey basic wellness issues such as nutrition, fitness, sexuality, drug abuse, and chronic and communicable disease prevention. The theory and practice of health education programs at the elementary level is discussed, including the use of a variety of methods and the development of relevant materials.

#### HED 3655-METH MAT HEALTH EDUC

This course examines the theory and practice of planning health education programs for the middle and secondary levels. Students will gain experience in the NC Course of Study in Health Education, writing unit plans and creating lesson plans. Development of instructional materials and a variety of teaching strategies are emphasized. Visitations and observations of health education classes are required.

#### HED 4650-DRUG EDUC & PREVENTION

The primary focus of this course is to introduce the complexities of drug-related issues. The social, psychological, pharmacological, cultural, educational and political aspects of drug use, including alcohol and tobacco, are examined. In addition, the methods, materials and theories of drug abuse prevention in the school and community are discussed.

#### HED 4710-TCH SEX ED W/IN FAM CONT

This course is designed to help health educators learn and develop strategies for teaching family living and sexuality to different age groups such as elementary, middle grades, secondary and adults. Topics to be included are reproductive anatomy, physiology, STDs and AIDS, varying cultural differences, and gaining community support. Each student will be responsible for developing appropriate curricular materials for the age group she or he will be teaching.

#### HED 4730-TCH STRESS MGT EMOT HLTH

This course will explore the factors associated with the development of emotional health and the management of stress as a basis for understanding the healthy personality. Emphasis will be directed towards teaching stress management and emotional health within an educational setting. Practical aspects of health education and program planning will be discussed. Students will be encouraged to deepen their commitment to affective teaching by applying the principles of self-esteem building, behavior self-management, communication, and accessing appropriate resources.

#### FCS 1000-APPAREL & CONSUMER BEHAVIOR

An introductory study of the nature and importance of life styles; communication, economics, psychology, sociology, design and concepts of manufacturing, marketing and retailing as factors which influence consumer acceptance and utilization of fashions.

#### FCS 1001-APPAREL CONSTRUCTION

Theories and principles of garment design and structure in relation to figure types and posture, including their application in construction and fit of apparel for men and women.

#### FCS 2000-CONSUMER TEXTILES

Consideration of textile fibers and fabrics from the viewpoint of the consumer. Factors related to raw materials, comparative quality, serviceability and cost of textiles used in apparel and home furnishings.

#### FCS 2002-DRAWING FOR APPAREL

An introductory course of quick sketching and drawing skills especially for apparel and textiles majors. Emphasis will be given to sight proportions, scale, perspective, figure drawing, rendering, and layout techniques. Students will become familiar and more skilled with drawing tools and materials. This course is designed for the non-art student who may not have previous drawing experience.

#### FCS 3002-APPAREL DESIGN & PRODUCTION

Interrelationship of historic costume, textile materials, design and fashion drawing and illustration as tools of apparel design and production. A study of apparel design and manufacturing processes.

#### FCS 3003-FASHION MERCHANDISING

An introduction to and exploration of the fashion industry in which the interrelated nature, development, and operation of the textile and apparel industry within a fashion merchandising context is studied.

#### FCS 3110-ENRICHING EXP SCHOOL AGE CHILD

Planning, developing, and implementing developmentally enhancing experiences to meet the total needs of children, 5-12 years of age, in a variety of programs, including after school programs, summer camps and institutes, YMCAs, etc.

#### FCS 4003-FASHION BUYING & RETAIL MATH

This course provides the basics of financial merchandise management and decision making for profitable apparel, textile and retail businesses. Merchandise buying is viewed from a qualitative and quantitative perspective.

#### FCS 4004-MERCHANDISING MGT: PRIN & PRAC

An integrative approach to the role of merchandising management from a qualitative and quantitative perspective. Acquired merchandising concepts and principles are integrated and synthesized for the examination and exploration of the many aspects of merchandising management. Includes simulated management activities such as: case study and role playing.

#### FCS 4102-STRESSORS: CHILD & FAM

Study of various critical issues affecting children with an emphasis on infancy and early childhood.

#### FCS 4131-TCH FAM & CONSUMER SCI

A study of the organization and management of the family and consumer sciences program in the secondary school (9-12) setting. Emphasis will be placed on instructional objectives and planning, curriculum development and utilization, classroom management and evaluation techniques. Includes an intensive, 30-hour field experience in a public school setting.

#### FCS 4315-HABITAT & PUBLIC POLICY

Historical and current politico-economic climates and their influences on the physiological, psychological and sociological aspects of housing. The interrelationships of the physical environment with people in urban, suburban, and rural housing situations. Current developments in housing with emphasis on private and federal programs.

#### FCS 4450-CONTEMP ISSUES IN FCS

An integrative study of contemporary issues in relation to individuals and families: child development, family relations, parenting, resource management, housing, interior design, apparel and textiles, food and nutrition. Team building and problem solving skills using interdisciplinary group assignments will be incorporated into presentation and discussion.

#### FCS 4551-FAMILIES IN LATER LIFE

In-depth study of factors influencing interrelationships in family development in the later years.

#### FCS 4553-ISS TRANSDISCIPL SERV DELIV

This seminar emphasizes the foundations for professional development, positive attitudes toward children and families, and the strong commitment toward continuous, life-long study of young children and their learning. Class discussions and assignments are designed to prepare B-K teachers to participate fully in interdisciplinary and transdisciplinary early childhood teams and to collaborate across agencies dealing with young children and their families.

#### FCS 4556-INFANT/TODDLER CURRICULUM

The purposes of this course are (1) to apply the principles of developmentally appropriate practice to planning, implementing, and evaluating curriculum experiences for infants and toddlers; and (2) to develop strategies for integrating a range of developmental needs and disabilities within the planned curriculum.

#### FCS 4602-PRESCHOOL CURR & INSTRUCTION

The purposes of this course are (1) to apply the major cognitive, language, affective, social and physical development theories to curriculum planning and implementation for all young children; and (2) to develop strategies for integrating a range of learning needs and disabilities into the planning and implementation of an early childhood curriculum. Emphasis will be on education services in public schools and other settings serving young children with typical and atypical needs.

#### FCS 4610-ADMN OF EARLY CHLDHOOD PROG

A study of the role of the program administrator in a variety of early childhood settings, both public, private and non-profit. This study will involve program planning, staff administration, assessment of facility and equipment needs, appropriate program and financial management using computer management software and studying the state regulations that govern programs for young children.

#### FCS 4680-KINDERGARTEN CURRICULUM

Designed for both birth-kindergarten and elementary education majors, this course provides information on the history of the kindergarten movement, an overview of development of five and six year olds, classroom organization and management, as well as specific, developmentally appropriate assessments and methods for teaching children in kindergarten.

#### FCS 4701-ED METHODS FAMILY & CONS SCI

A study of the principles of teaching and learning applied to family and consumer sciences content. The course will address instructional methods appropriate for formal and non-formal educational settings, focusing on specific oral strategies and computer applications.

#### HPC 2200-LIFE & CAREER PLANNING

This individually oriented study helps students consider those career choices and related factors contributing to satisfaction and happiness in life. The process of decision making, goal setting and self-management by objectives will be studied in order for the student to plan systematically for a career.

#### HPC 2700-PRINCIPLES OF LEADERSHIP

Designed to introduce students to models and theories of leadership and to create an understanding of and an appreciation for the increasing complexity of leading diverse organizations. The course will provide students with opportunities for self-discovery, personal growth and skill development through active learning and group discussions.

HPC 4300-ADV STUDENT LDRSHIP DEV

Designed for designated student body officers/leaders to develop and practice their leadership capabilities. It combines the theoretical understanding through the classroom setting with the practical concepts through a practicum. Emphases include an understanding of the University community, clear organizational goals, advanced leadership concepts, and related topics/issues.

HPC 4570-THE ADDICTIVE PROCESS

An examination of sociological and psychological contributants to alcohol and drug addiction and abuse in our society. The addictive process and its impact on the individual and society are described, as well as treatment and prevention program efforts. Students will also examine their own feelings and attitudes about alcohol and drug use and abuse.

HPC 4710-TCH SEX ED W/IN FAM CONT

This course is designed to help health educators learn and develop strategies for teaching family living and sexuality to different age groups such as elementary, middle grades, secondary and adults. Topics to be included are reproductive anatomy, physiology, STDs and AIDS, varying cultural differences, and gaining community support. Each student will be responsible for developing appropriate curricular materials for the age group she or he will be teaching.

HPC 4840-HUMAN REL & INTERACTION

Examines the key elements in effective interpersonal communication. Students will be exposed to one or more human relations models that are designed to improve their communication skills. Emphasis will be given to applying constructive methods of human relations in a variety of settings including business, schools, and social service agencies.

FDN 2400-CRITICL PERSP LEARN & TEACHING

Learning and teaching and the relations between learners and teachers are inherently moral, intellectual, and emotional. Beginning with the deceptively simple questions Why Learn? and Why Teach?, this course provides students with the opportunity to explore such questions in the context of what education should mean for democratic life. Examining schooling from the perspective of the reflective practitioner, the course helps students inquire into and voice understandings of the varied ways that social, cultural, and political issues impact teaching and learning, especially the intersections of race, class, gender, sexuality and religion. Students and professors will work together to develop specific questions that will guide students as they engage in an inquiry project in a school or in the community. The ability to ask and answer questions is fostered throughout the course and is put into practice in the inquiry project.

FDN 4800-EDUC OF CULT DIVERSE

A general survey of situations encountered by the teacher in a culturally diverse society. As emphasis on the development of the empathetic teacher and the creation of teacher strategies and materials.

FDN 4810-EDUC APPALACHIAN AMER

A course designed to assist the teacher of mountain children in understanding the pupil and school in the Appalachian culture. Various Appalachian cultural descriptors and their effect on schooling will be discussed with attention to the creation of teaching strategies and materials. Open to graduates and seniors.

ITC 2010-NARRATIVE, NEW MEDIA & GAMING

#### R E 3030-FOUNDATIONS OF LITERACY

This course focuses on early reading and writing development (K-3). Students will explore critical issues of literacy acquisition, assessment, instruction, and intervention. Special attention will be given to effective methods for reading, writing, and word knowledge instruction, including materials, strategies, and organization to meet the needs of all learners. Selected assessment and instructional activities will be designed for implementation with elementary students during field placement experiences.

#### R E 3240-WORLD LIT FOR CHILDREN

Students will read and analyze translations and other children's books in English from countries around the world. Literary analysis of the books will form the basis for comparing and contrasting cultures, historical periods, and differing national worldviews of childhood. Other issues such as racism and sexism will also be examined.

#### R E 3900-PR READ INSTN CLRM TCHR

This course is a major professional course which prepares teachers to teach reading in grades K-12. Knowledge objectives of the course focus on the developmental nature of language and reading ability, along with some major issues and instructional materials and practices associated with reading instruction. Performance objectives are designed to develop skills in (1) diagnosing individual differences, (2) setting goals and objectives for reading instruction, (3) evaluating reading behavior, (4) developing instructional strategies, and (5) utilizing resources for reading instruction.

#### R E 4300-LIT, LANG & CULT M GR EDUC

Prospective middle grades teachers will have the opportunity to learn about the foundational and current issues and methods of instruction regarding literacy education at the middle grades level. Emphasis is placed on the politics of language and identity, socio-cultural contexts for adolescent literacy development, diverse literacy learners, and effective instructional strategies. Students enrolled in the course learn to assess students' literacy needs and acquire knowledge of a range of practices that support the literacy development of young adolescents.

#### R E 4710-DIAG REMED OF READ PROB

Prepares students to administer and interpret commonly used informal reading tests and to plan appropriate instruction for different types of remedial readers.

#### R E 4720-DIAG & REMEDIAL READ I

The course deals with commonly used reading tests and how to locate causes of reading difficulties and to prescribe corrective procedures for the severely disabled reader.

#### R E 4730-DIAG & REMEDIAL READ II

Students are assigned to individual or small groups for diagnostic and remedial teaching.

#### SPE 3300-CREATNG INCLSVE LRNG COMMNTIES

This course will prepare 21st century teacher education candidates in all disciplines and grade levels to create inclusive learning communities for all students. 21st century teacher education candidates will recognize and accommodate the individual needs of students from differing abilities, backgrounds, and cultures. The course will inform teacher education candidates of the legal requirements and issues, evaluation procedures, individualized instruction, assessment, and strategies for including students with disabilities and from diverse backgrounds in inclusive education environments, with an emphasis on Universal Design for Learning, self-determination, and assessing student progress.

#### SPE 3380-ASSISTIVE TECH IN SPEC EDUC

This course provides an understanding of universal design for learning and assistive technology and application in instructional programs and life skills for students with disabilities. Students will learn to design appropriate instructional programs utilizing instructional and assistive technologies. Students will be provided with hands-on practice and demonstration of technologies that will enable them to consider, select, and implement effective technologies for their students in school, home, and community environments.

#### SPE 4410-INDIV ASSESSMNT & CURRIC ADAPT

This course examines current issues and methods related to assessment, personalized curriculum development, and the planning, implementation, and evaluation of instruction of students with moderate and severe disabilities. This course is required for students majoring in Special Education with a concentration in Adapted Curriculum K-12.

#### SPE 4553-ISS TRANSDISCIPL SERV DELIV

This seminar emphasizes the foundations for professional development, positive attitudes toward children and families, and the strong commitment toward continuous, life-long study of young children and their learning. Class discussions and assignments are designed to prepare B-K teachers to participate fully in interdisciplinary and transdisciplinary early childhood teams and to collaborate across agencies dealing with young children and their families.

#### SPE 4556-INFANT/TODDLER CURRICULUM

The purposes of this course are (1) to apply the principles of developmentally appropriate practice to planning, implementing, and evaluating curriculum experiences for infants and toddlers; and (2) to develop strategies for integrating a range of developmental needs and disabilities within the planned curriculum.

#### SPE 4570-ADVOC & LEGISL IN SPEC EDUC

This course provides information and practice related to the roles and responsibilities of professionals with regard to advocacy and legislative mandates, including the special education process and individual education programs.

#### ART 1001-FOUNDATIONS I

Basic introduction to two-dimensional design emphasizing the structural elements of art, the principles of visual organization, and the psychological effects of visual decision making. Color theory, including schematic uses and historical and psychological aspects, will be explored along with the application of color mixing and color integration. There will be an introduction to the critical and analytical approaches to the visual arts. Studio six hours.

#### ART 1002-FOUNDATIONS II

This course is the second half of an introduction to the structural elements of art. It examines the organizational principles of threedimensional design and the study of equipment and materials used in this area of art making. Emphasis is on three-dimensional vocabulary, understanding of sculptural space, the use of hand and power tools, materials manipulation, and processes related to three-dimensional art. Studio six hours.

#### ART 1003-FOUNDATIONS DRAWING

An introduction to drawing as a primary means of visual investigation. Major class topics include drawing from observation and visualization (drawing from imagination). Class exercises focus on rendering objects, spaces, and the human figure in basic wet and dry media (graphite, charcoal, and ink). Conceptual and process-centered approaches in contemporary drawing will be introduced. Studio six hours.

#### ART 1004-VISUAL ARTS EXHIBITION GUIDE

Students will familiarize themselves with current exhibitions of the Turchin Center for the Visual Arts, research aspects of the exhibitions, prepare educational materials, and give tours to groups and individuals. Open to art majors and non-art majors. Lecture/practicum one hour per week. May be repeated for a total of six semester hours credit.

#### ART 1005-STUDIO SEMINAR I

This course is a global introduction to the theory and practice of the visual arts, and it also introduces students to many of the institutional resources available for the aspiring visual artist. It includes an overview of art world institutions and their relevance to understanding the artist's role in the world today; the relationship among art history, art theory and studio practice; and issues central to attaining professional competency such as preparing artists' statements, documenting one's work, and researching educational and funding sources. Lecture and studio four hours.

#### ART 1020-CORE STUDIO I

Introduction to two-dimensional studio experience, combining practices in 2D design, drawing, painting, and collage. This course focuses on making and interpreting images through sketch exercises, creative visual research, and long-term mixed media projects. Studio six hours.

#### ART 1021-CORE STUDIO II

Introduction to three-dimensional and four dimensional studio practices combining practices in 3D design, object making, and time based media. This course focuses on making and interpreting forms and actions through sketch exercises, creative visual, research, and long-term mixed media projects. Studio six hours.

#### ART 1102-INTRO TO GRAPHIC DESIGN

This is an introductory level course for students entering the field of graphic design. It involves studio inquiry into the nature of visual communication. The course is structured to foster a personal approach to the design process and the ability to discuss design critically. Topics introduced in the course include typography, symbols, contemporary design practice and the relationship between designer, audience and message. Work produced in this course allows for the discovery of the language, creative problem-solving processes and technologies fundamental to graphic design. Prerequisites: ART 1001 and ART 1003. Studio six hours.

#### ART 2007-CLAY I: HANDBUILDING

An introduction to clay as a material and means of expression, with emphasis on the development of content with hand-formed objects. Consideration will be given to ceramic history in relation to contemporary practice. Students will develop critical and reflective thinking skills in relation to their studio production through research, writing, discussions and presentations. Prerequisites: ART 1001 and ART 1002, or ART 1020 or ART 1021. Studio six hours.

#### ART 2008-FIBERS:MATERIALS & PROCESSES

A general introduction to a broad range of basic fibers processes and materials, such as dyeing and block printing, papermaking, felt-making, tapestry and wearables. Emphasis is on the development of technical fibers skills with application to individual works of art and design. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 2009-METALSMITH & JEWELRY DSGN I

This course will focus on processes for construction with nonferrous metals. Techniques will include basic fabrication, stone setting, forming and the creation of mechanisms. Prerequisites: ART 1001 and ART 1002, or ART 1020 or ART 1021. Studio six hours.

#### ART 2011-INTRODUCTION TO VISUAL ARTS

This course covers selected historical and contemporary issues, the formal structure and critical analysis of the visual arts and an examination of art's relationship to ideas, beliefs and culture. Students will develop a critical understanding of art as a manifestation of broader social, historical, and contemporary issues in a global context. Lecture three hours. (CORE: HUMANITIES)

#### ART 2016-INTRO CONTEMP ISSUES ART & DES



An introductory exploration of contemporary studio practice, with a specific thematic focus. Students will use sketchbook development, material experimentation, and visual research in their study of specific class themes. Projects will introduce a variety of two dimensional, three dimensional, and time-based media. Sample themes may include contemporary ideas in international culture, technology, history, and social and environmental causes. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Studio six hours.

#### ART 2019-ART FOR SOCIAL CHANGE

This course combines an introductory studio course with an examination of the way in which art can contribute to social change. Studio assignments will involve students in the investigation, understanding and application of artistic methods and the principles of design while thematically exploring contemporary social issues. Lectures, class discussions and project critiques are geared to develop students' awareness of how art can address social issues. Studio six hours.

#### ART 2022-CULT CRTV EXPRSSN TGH VIS ARTS

Students will create works of visual art in various media, reflecting on the creative process, the influence of culture, and the dynamic and reciprocal interactions among the artist, instructor, and student. Lecture and studio four hours.

#### ART 2025-PRINTMAKING: RELIEF

A general introduction to printmaking: its history, development, techniques, and processes. Various relief printmaking techniques will be explored such as woodcut, linocut, collagraph, and non-traditional methods. Using additive and reductive processes, students work in black and white and in color, learning the registration and printing of multiple matrices. Traditional, contemporary, and experimental approaches are encouraged. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 2026-PHOTOGRAPHIC DESIGN I

An introduction to photography. This course offers a foundation in the basic technical skills and aesthetic knowledge needed to create fine art photography. Historical and contemporary issues, critical thinking, and visual analysis will be emphasized through oral discussion and written documentation. A camera is required per the instructor's directions. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 2040-CLAY I: MOLD-MAKING & CASTING

An introduction to the materials and methods particular to the creative use of ceramic mold-making and casting. Students will develop critical and reflective thinking skills with regard to their studio production through research, writing, discussions and presentations. Focus will be on employing ceramic processes and firing methods relevant to content. Prerequisites: ART 1001 and ART 1002, or ART 1020 or ART 1021. Studio six hours.

#### ART 2050-CLAY: METHODS & MATERIALS

This course involves hands-on working experience with ceramic raw materials and the formulation of clay bodies and fired surfaces, with an emphasis on accurate testing and recording methods. Students are expected to assess and apply the results of this materials research to the conceptual development of their work. Prerequisite or corequisite: any level I clay course (ART 2007, ART 2016 in clay, ART 2040, or ART 2107) or permission of the instructor. Studio six hours.

#### ART 2100-PAINTING I

An introduction to the principles of spatial organization and color interaction. Includes exploration of concept, materials and techniques, light, color, form, and space. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 2101-SCULPT I: MODELING & CASTING

An introduction to sculptural ideas and concepts developed through modeling in clay, wax and plaster molding processes. An introduction to foundry casting includes basic sand casting and plaster investment processes. Prerequisites: ART 1001 and ART 1002, or ART 1020 or ART 1021. Studio six hours.

#### ART 2102-TYPOGRAPHY I

This course concentrates on the study of typography. Course includes a survey of major typographical trends, analysis of letterforms, typesetting methods and the use of type in layout design. Prerequisites: ART 1001 and ART 1003. This course (ART 2102) may be taken concurrently with, but not before ART 1102. Studio six hours.

#### ART 2103-DRAWING II

An exploration of contemporary drawing practices, focusing on process, experimentation, content development, and refining observational drawing skills. Class projects address creative problem-solving in composition, visualization, and graphic expression. Emphasis is on the figure as a subject matter and drawing from the live model. Introduction to a broader range of drawing media, including color and collage. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 2104-DIGITAL IMAGING

This course introduces the student to technical and aesthetic aspects of digital image manipulation for artists and designers. Prerequisites: ART 1001, ART 1002, and ART 1003 or ART 1020 and ART 1021 for declared Art Management majors. Studio six hours. (COMPUTER)

#### ART 2107-CLAY I: THROWING

An introduction to clay as a material, using the potter's wheel as a tool to generate form and express ideas. Technical skill and concept development will be emphasized. Students will develop critical and reflective thinking skills with regard to studio practice through research, writing, discussions and presentations. Prerequisites: ART 1001 and ART 1002, or ART 1020 or ART 1021. Studio six hours.

#### ART 2125-PRINTMAKING: SCREENPRINTING

This course introduces photomechanical screenprinting processes and techniques to create original prints. There is an additional emphasis on color theory for printmaking as well as techniques for creating editions and experimental prints. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 2201-SCULPT I: CARVING & CONSTR

An introduction to sculptural ideas and concepts developed through carving in stone and wood and additive construction in materials such as welded steel. The student is introduced to the use of specialized hand and power tools including pneumatic chisels and die grinders as well as power sanders and grinders required for shaping and finishing stone, wood and steel.

Prerequisites: ART 1001 and ART 1002, or ART 1020 or ART 1021. Studio six hours.

#### ART 2222-INTRO TO ART EDUCATION

This introductory course in art education will cover: current practices and philosophies in art education; multiple histories of art education; assessment as artifact; teacher as listener; and the role of materials to support, integrate, and challenge the artistic growth of young people in school. Students will learn how to create a lesson plan based on a provocation in an emergent integrative curriculum. Students will observe different teaching settings with perceptual, societal and artistic analysis implicit in programs observed. Participation in Saturday morning art workshops is expected.

#### ART 2302-CALLIGRAPHY

An introduction to hand-lettering. Both monoline and edged-pen lettering styles are studied in their historical context, including Roman capitals, minuscules, and Italic styles. The application of color to letter forms will be examined, as well as various methods of page composition, surface decoration and bookbinding. Prerequisite: ART 1001 or permission of the instructor. Studio six hours.

#### ART 2444-MAT'L & PROCESSES IN ART ED

This course will offer an in-depth and sustained exploration of the properties, structures, and expressive uses of selected art materials. The course aims to enrich and extend personal visual repertoires and in parallel, provoke insights into the role of materials in supporting, integrating and challenging the artistic growth of young people in school. Prerequisite: portfolio review.

#### ART 2500-INDEPENDENT STUDY

Majors in art may broaden and intensify their program through individual research and involvement in a given area of art. Prerequisite: permission of the departmental chair.

#### ART 2601-TEXTILE DESIGN

An introduction to weaving and surface design techniques. Emphasis is on material selection, color theory and image sources as applicable to the development of individual textile designs. Prerequisite: registration is restricted to students majoring in the B.S. degree in Apparel and Textiles, or by permission of the instructor. Studio six hours.

#### ART 2602-FIBERS: WEAVING I

An introduction to the weaving loom as an art-making tool, through basic weave structures, hand-manipulated weaves and weavedrafting. Emphasis is on the selection of materials, woven structures, and color theory as related to the development of individual works of art and design. Prerequisites: ART 1001 and ART 1003, or ART 1020 or ART 1021. Studio six hours.

#### ART 3007-CLAY II: HANDBUILDING

An in-depth exploration of processes and firing methods with hand-formed clay. Emphasis is on the development of conceptual skills and an individual approach. Structured and student-generated assignments will integrate technical skill with creative insight. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2007, and portfolio review or permission of the instructor. Studio six hours.

#### ART 3009-MTL SMTH & JEWELRY DSGN II-CAST

This course will introduce centrifugal casting, rubber mold making, advanced stone setting, repousse and chasing. Students will continue to develop and incorporate forming and fabrication skills. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2009 and portfolio review. Studio six hours.

#### ART 3015-STUDIO SEMINAR II

Designed primarily for students seeking the Bachelor of Fine Arts degree in Studio Art, this course will explore what a BFA in Studio Art is, the kind of training a BFA student can expect to receive, and the role of and expectations for the BFA degree in the contemporary art world. This course also provides a global and integrated introduction to the theory and practice of art making as it informs and is informed by the many institutions comprising the art world. It will explore various rationales and strategies for making, promoting, and displaying art. Prerequisites: ART 1001, ART 1002, ART 1003, ART 1005 and portfolio review. Lecture and studio four hours.

#### ART 3017-FIBERS: WEAVING II

Further exploration of weaving as a technique for art-making. Emphasis is on the development of critical thinking and technical weaving skills with application to individual works of art and design. Includes integrations with other fibers processes and techniques. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2601 or ART 2602 and portfolio review. Studio six hours.

#### ART 3021-VISUAL ART IN ELEM SCHOOL

A general orientation to visual art teaching/learning for the elementary level teacher. Students will study visual culture as it relates to children's art-making and the larger world. The class offers a studio experience with ongoing sketchbook assignments. There is a practicum requirement outside of class time where students implement art education theories and methods in an actual teaching situation and perform a child study based on art education meaning-based pedagogy. Lecture two hours per week, studio two hours per week, plus observations and teaching experiences outside of class time are required. (Note: Those pursuing a second concentration in visual arts should take ART 2420 instead of ART 3021.)

#### ART 3022-ART EDUC: BIRTH THROUGH SIX

Focusing on the child, ages birth through six, this course is based on a theory of visual culture: the questioning of developmental stages, the image of the child as a cultural convention, personal narrative, meaningful art practice, and recognizing art as a dialogue between individuals and culture. Readings, written responses, discussions will be based on what we know collectively about the growth and development of the young child, good teaching practice, and critical pedagogy. The class will offer studio experiences, observations and teaching experiences. Students will design and implement a case study. Lecture two hours per week, studio two hours per week, plus observations and teaching experiences outside of class time are required.

#### ART 3040-CLAY II: MOLD MAKING & CASTING

An in-depth exploration of molds and casting to attain broader technical and conceptual skills in clay and mixed media. Coursework will include installation, site specific and collaborative endeavors. Structured and student-generated assignments will bridge+ technical awareness and creative insight. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2040 and portfolio review or permission of the instructor. Studio six hours.

#### ART 3050-DIGITAL PHOTOGRAPHIC DESIGN

This course will develop basic skills in digital art photography, building on knowledge gained in ART 2026 (Photographic Design I). Photographic image-making will be explored utilizing digital cameras and image-software. Issues in photography will also be investigated. Readings, discussions, field trips, lectures, research, written assignments and image presentations will be incorporated into the coursework. A DSLR camera is required per the instructor's directions. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2026 and portfolio review or permission of the instructor. Studio six hours.

#### ART 3100-PAINTING II

Further exploration of formal issues such as light, color and space. Additional examination of painting techniques, processes and materials. Emphasis is on more challenging, concept-driven assignments. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2100, and portfolio review. Studio six hours.

#### ART 3102-TYPOGRAPHY II

Second course in the typography sequence focusing on the design of multiple pages, an introduction to publication design, basic typographic systems, and typographic hierarchy. An introduction to the use of type with image and the surface design of threedimensional form will be studied. Students who do not pass Candidacy Portfolio Review before starting this course will be required to drop the course. Prerequisite: Graphic Design Candidacy Portfolio Review. Studio six hours. (COMPUTER)

#### ART 3103-CONTEMP ISSUES ADVANCD DRAWING

A further exploration of contemporary drawing practices, with a specific thematic focus. Students will use sketchbook development, material experimentation, and visual research to create an independent body of work. Class themes include the human figure, narrative and sequential art, illustration, process and abstraction, and digital drawing media. All classes will examine the cross-cultural development of drawing in art history, and students will also have the opportunity to explore a variety of contemporary aesthetic approaches. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2103 and portfolio review. Studio six hours.

#### ART 3107-CLAY II: THROWING

An in-depth exploration of wheel-thrown clay to attain broader technical and conceptual skills. Emphasis is on the development of critical thinking and an individual approach to materials and processes through structured and student-generated assignments which will bridge technical awareness and creative insight. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2107 and portfolio review or permission of the instructor. Studio six hours.

#### ART 3109-METALSMITH JWLRY DSGN II HLWR

This course will introduce the smithing processes of raising, stretching, sinking and shell forming used in the creation of both traditional and nontraditional hollowware forms. In addition, students will continue to develop fabrication, stone setting and casting techniques by adapting and integrating them into more complex and sophisticated forms. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2009 and portfolio review. Studio six hours.

#### ART 3110-MTLSG JRY DGN II COMPUTR AIDED

This course will introduce computer aided design and rapid prototyping processes currently used in the field of jewelry design and manufacture. Students will design and create objects using CAD software and rapid prototyping machinery. In addition, students will continue to develop traditional fabrication, stone setting and casting techniques by adapting them to the CAD/CAM environment. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2009 and portfolio review. Studio six hours.

#### ART 3111-MTLSG JRY DGN II ENAMELING

This course will introduce the processes of cloisonné, plique-a-jour and champlevé enameling. In addition, students will continue to develop traditional fabrication techniques, adapting and integrating them into their enameling designs. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2009 and portfolio review. Studio six hours.

#### ART 3140-PRO PRACTICE: STUDIO ART

This course will provide students with the opportunity, support and direction to begin their professional lives. It focuses on considering the options available with an undergraduate degree in art, and on acquiring the practical skills and knowledge vital for a professional life in a creative field. Students will learn about the pragmatics of a creative career, and understand what steps to take toward that career. Appropriate for students in all Art Department degree tracks. Prerequisite: junior or senior standing or permission of the instructor. Lecture and studio four hours.

#### ART 3200-PAINTING III

An experimental and conceptual approach to painting. Encourages the exploration of conventional and unconventional media and the development of visual sensibility. Includes the study of contemporary issues and the cultivation of individual direction. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2103, ART 3100 and portfolio review, or permission of the instructor. Studio six hours.

#### ART 3201-SCULPTURE II: CONTEMP ISS

Intermediate focus on traditional and/or experimental sculptural processes, media or techniques. Topics to be considered may include installation art, digital art, performance art or site specific sculpture as well as in-depth study of traditional media. Course content will vary from semester to semester. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2101, ART 2201 and portfolio review. Studio six hours.

#### ART 3202-INTERACTION DESIGN I

An intermediate intermediate graphic design course involving complex interactive projects for the web and other technologies using standards-compliant HTML and CSS. Students will have the opportunity to learn the application of semantic code markup in order to gain an understanding of the separation of content and form in dynamic media. Alternate forms of scripting for the web, animation and motion graphics, and interaction with databases will also be introduced. Prerequisites: ART 2026, ART 2103, ART 2104, and ART 3102. Studio six hours. (COMPUTER)

#### ART 3208-FIBERS: SURFACE DESIGN I

An exploration of fabric surface design materials and processes, such as dye applications, screen-printing and repeat patterning. Emphasis is on critical thinking and development of technical skills with application to individual works of art and design. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2008 or ART 2601, and portfolio review. Studio six hours.

#### ART 3225-PRINTMAKING: INTAGLIO

A general introduction to etching and various techniques associated with traditional and contemporary intaglio printmaking. Students will explore a variety of intaglio effects using plate materials such as zinc, copper, and Plexiglas. Traditional, contemporary, and experimental approaches are encouraged. Prerequisites: ART 1001, ART 1002, ART 1003, and portfolio review or permission of the instructor. Studio six hours.

#### ART 3226-PHOTOGRAPHIC DESIGN II

An intermediate course in fine art photography. The course explores more advanced techniques and processes as well as aesthetic, technical and conceptual problem-solving, critical analysis of image-making and historical and theoretical issues in the field. A camera is required per the instructor's directions. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2026 and portfolio review or permission of the instructor. Studio six hours.

#### ART 3227-SPECIAL TOPICS IN PHOTOGRAPHY

In this course, students will examine a specialty area in photography through discussion, research, writing, presentations and/or creative studio work. Content may vary. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. A camera is required per the instructor's directions. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2026 and portfolio review or permission of the instructor. Studio six hours.

#### ART 3302-IDEA LAB

The course will function as a creative laboratory, providing students the opportunity to be immersed in and mindful of the design process. Course topics include innovation methodologies, design processes, visualization, prototyping and testing. Through exercises, readings, research and studio projects, students will develop lifelong skills to foster the good ideas that lead to meaningful creative work. Students who do not pass Candidacy Portfolio Review before starting this course will be required to drop the course. Prerequisite: Graphic Design Candidacy Portfolio Review. Studio six hours.

#### ART 3308-FIBERS: STRUCTURE I

An exploration of various three-dimensional fibers techniques, such as off-loom structural processes, paper forms and found materials. Emphasis is on critical thinking and development of technical skills with application to individual works of art and design. Prerequisites: ART 1001, ART 1002, ART 1003, ART 2008 and portfolio review. Studio six hours.

#### ART 3312-MOTION GRAPHICS

This is an intensive course in time-based media for artists and designers. Students will create broadcast quality animation and compositing projects for television, web and other technologies. Students will use type and images to learn a variety of production techniques in digital audio, digital video, animation and other special effects. Post-production presentation techniques targeting the broadcast and theatrical industry, the web and other technologies will be covered. Prerequisite: ART 2104 or permission of the instructor. Studio six hours.

#### ART 3322-SIGN, SYMBOL, IMAGE

An introductory study of signs, symbols and images in the context of graphic communication. The course includes theoretical and practical considerations of the relationship between visual form and cultural meaning. Course projects address visual perception and interpretation, abstraction and stylization, symbol typologies, gestalt of design, semantics and typography, and the application of semiotics and rhetorical tropes to visual communication. Course objectives are to enhance students' analytical skills and situate graphic design practice in a larger socio-cultural context. Prerequisites: ART 2104 and ART 3102. Studio six hours.

#### ART 3325-PRINTMAKING: LITHOGRAPHY

This course introduces the basic chemistry, processes and techniques of stone, plate, color and photo-lithography. Emphasis is on the technical proficiency and the development of editions that reflect unique pictorial themes. Prerequisites: ART 1001, ART 1002, ART 1003 and portfolio review, or permission of the instructor. Studio six hours.

#### ART 3332-DESIGN METHODS

This course includes a survey of research methods that enhance creative conceptualization abilities and provide research-based evidence that supports design decisions. Students examine case studies; analyze secondary research; experience various contextual research methods; and conduct and apply primary research that uses a variety of design methods (interview, observational and participatory). Prerequisites: ART 2104, ART 3102 and ART 3302. Lecture and studio four hours.

#### ART 3400-WOMEN ARTISTS

This course will provide a historical and contemporary survey of women visual artists. Lecture three hours. Prerequisite: ENG 2001 or its equivalent. (WRITING)

#### ART 3408-FIBERS: SURFACE DESIGN II

Further exploration of surface design processes as techniques for art-making. Emphasis is on critical thinking and development of technical skills with application to individual works of art and design. Integrations with other fibers processes and techniques. Prerequisites: ART 1001, ART 1002, ART 1003, ART 3208 and portfolio review. Studio six hours.

#### ART 3410-BOOK ARTS

This course investigates the potential of combining text and image using digital and photo-printmaking techniques to create artists' books with content. There is a secondary focus on mastering binding structures. Prerequisites: ART 1001, ART 1002, ART 1003, and portfolio review or permission of the instructor. Studio six hours.

#### ART 3508-FIBERS: STRUCTURE II

Further exploration of structural fibers processes as techniques for art-making. Emphasis is on critical thinking and development of technical skills with application to individual works of art and design. Integrations with other fibers processes and techniques. Prerequisites: ART 1001, ART 1002, ART 1003, ART 3308 and portfolio review. Studio six hours.

#### ART 3602-SPEC TOP GRAPHIC DESIGN

Students examine in detail a speciality area in graphic communication, through discussion, research and creative studio work. Examples of topics might include: illustration, exhibition design, packaging design, and publication design. Content to vary; may be repeated for credit when content does not duplicate. Prerequisite: Graphic Design Candidacy Portfolio Review. Studio six hours.

#### ART 3610-ASIAN ART

The art forms of three Asian cultures - India, China, and Japan are explored. Particular attention is devoted to painting, sculpture, and architecture as well as the unique forms of each culture. Prerequisite: ART 2030 or ART 2130 or permission of the instructor. Lecture three hours.

#### ART 3630-AFRICAN ART

This course explores major themes in the study of the visual arts in Africa. Works of art from the ancient rock paintings of the Sahara, through the ancient artistic traditions of Ife and Benin, to the arts of the colonial and post colonial periods are presented. Diverse forms of art works are studied in their social, religious, and political contexts. Prerequisites: sophomore standing or consent of the instructor and ENG 2001 or its equivalent. Lecture three hours. (WRITING; MULTI-CULTURAL)

#### ART 3650-ART OF LATE ANTIQUITY

A course in the Late Antique art, covering early Christian, Byzantine and early Islamic art. Focus on the social context of ancient art production and reception. Prerequisites: ART 2030 or consent of the instructor and ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### ART 3700-OCEANIC ART

This course examines the visual arts of the Pacific Islands, Australia, New Zealand, and New Guinea, including tattooing and other body adornment practices, architecture, sculpture, and textiles. The course explores the ways oceanic arts since the 18th century embody resistance and survival through the continuity of traditional art forms as well as work in more contemporary media and styles. Lecture three hours. Prerequisites: sophomore standing or consent of the instructor and ENG 2001 or its equivalent. (WRITING)

#### ART 3705-CONTEMPORARY ART OF AFRICA

This course examines themes in the study of the recent visual arts of Africa and the Caribbean during the colonial and post-colonial period. This course explores the ways that artistic production reflects its local background and circumstances as it enters into a dialog with a global art scene. The course will examine art as a sensitive barometer of social, cultural, religious, and political changes in modern Africa and the Caribbean. Prerequisite: ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### ART 3710-ANCIENT EGYPTIAN ART

A course in the history of Egyptian art, from archaic through early Christian periods. Focus is on the social context of ancient art production and reception. The course includes critical reading, writing, and discussion. Prerequisites: ART 2030 or permission of the instructor and ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### ART 3730-NATIVE ARTS OF AMERICAS

This course explores the native arts and architecture of North America, Central America and South America. Diverse forms of artworks are studied in their social, religious, and political contexts. The focus of the course may be in any of the three major cultural regions, from prehistory to the present. Prerequisites: sophomore standing or permission of the instructor and ENG 2001 or its equivalent. Lecture three hours. (WRITING; MULTICULTURAL)

#### ART 3750-HISTORY OF ROMAN ART



A course in the history of Roman art, from archaic through early Christian periods. Focus on the social context of ancient art production and reception. Prerequisites: ART 2030 or consent of the instructor and ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### ART 3760-HISTORY OF AMERICAN CRAFT

This course will consider the development of American studio craft from a historical perspective and continuing to the present day, considering craft objects as discreet entities and in relation to other creative output. Lecture three hours.

#### ART 3800-ART SINCE 1945

A survey of leading movements in contemporary art from 1945 to the present. Lecture three hours. Prerequisites: ART 2130 or consent of the instructor and ENG 2001 or its equivalent. (WRITING)

#### ART 3810-PHOTOGRAPHY & CULTURE

This course invites students to develop a critical understanding of the relationship between photography and culture. Readings, lectures, presentations and discussions on historical and contemporary photographers will be incorporated into the coursework. Prerequisites: ART 2130 or permission of the instructor and ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### ART 4012-EXHIBITIONS PRACTICUM

This practicum course introduces students to the fundamental principles and practical responsibilities of managing and maintaining art exhibitions. Students gain experience planning, promoting, designing, and installing exhibitions and events in the Catherine J. Smith Gallery. Prerequisite: sophomore standing. Lecture and practicum four hours.

#### ART 4013-BUSINESS OF ART

An introduction to the theoretical and practical issues encountered by artisans on a day-to-day basis. The artisans will delve into various business topics such as taxes, insurance, bookkeeping, commission agreements, copyright laws, and other applications necessary for establishment of good business practices. Prerequisites: 6 s.h. above the 2000 level in any ONE studio area (excluding graphic design) or 6 s.h. above the 3000 level in art history. (WRITING)

#### ART 4030-SEM ART CRITICISM & THEO

A seminar in the theory and criticism of art in which leading methods of analysis are examined through readings and discussion. Major emphasis is placed upon the student developing a critical sense of art. Prerequisites: ART 2030 and ART 2130, or consent of the instructor. Lecture three hours. (WRITING; SPEAKING)

#### ART 4040-SEMINAR IN ART HISTORY

This advanced seminar in art history will focus on in-depth inquiry into a particular period, theme, place or genre in art history.

Content will vary from semester to semester. May be repeated barring duplication of content for a total credit of 12 semester hours. Prerequisites: ART 2030, ART 2130 and ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### ART 4102-TYPOGRAPHY III

Third course in the typography sequence stressing the dynamic relationships among content, form and context to gain a deeper understanding of systems at many levels. Other topics may include: packaging, expressive, environmental, dynamic, and interactive typography.

Prerequisites: ART 2026, ART 2103, ART 3102, and ART 3302. Studio six hours.

#### ART 4109-METALSMITH & JEWELRY DSGN IV

Study of advanced techniques and processes appropriate to developing an individual aesthetic in the area of metalsmithing and jewelry design. Students will complete a technical research project. Prerequisite: ART 3109. Studio six hours.

#### ART 4192-GRAPHIC DESIGN SENIOR SEMINAR

This course prepares students for their final senior design project in ART 4202, Graphic Design Senior Studio (GEN ED: Capstone Experience). These two courses, taken in sequence, provide an opportunity for advanced students to demonstrate a mature understanding of design practice. Through readings, literature review, and research assignments, the graphic design senior seminar examines contemporary issues in design, the expanding practice of design and addresses the relevance of pre-design stages to the design process as a whole. Students conduct research and locate their interests within the design discipline before producing proposals for their capstone project. Prerequisites: ART 3202 and ART 4102. Lecture and studio four hours.

#### ART 4202-GRAPHIC DESIGN SENIOR STUDIO

The culminating course in the graphic design program, this course addresses self-reliance and the application of research and creative inquiry to the realization of projects proposed in ART 4192 (Graphic Design Senior Seminar). Students will produce a portfolio of work that demonstrates analytical, conceptual, visual and technical maturity. Passing a portfolio review is a requirement of this course. Prerequisites: ART 3050, ART 3202, ART 4102, and ART 4192. Studio six hours. (SPEAKING)

#### ART 4300-SPEC TOPICS ADV PAINT & DRAWNG

This is an advanced painting and drawing studio course designed to develop personal vision and critical thinking. Emphasis is on the evolution of formal practice and self-evaluation. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisites: ART 2100, ART 3100, and ART 3200 or ART 3103. Studio six hours.

#### ART 4301-SPEC TOPICS ADVANCED SCULPTURE

An advanced development of sculptural expression. The students will be expected to develop a personal approach to sculptural content and style as well as develop standards of critical judgment in the analysis of their own work. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisite: ART 3201. Studio six hours.

#### ART 4302-INTERACTION DESIGN II

This is an advanced graphic design course involving complex interactive projects for the web and other technologies using dynamic and media-rich interactive media. Projects may include animation, typography in motion, data visualization, interactive exhibits and narratives, and other time-based experiences. Prerequisites: ART 3102 and ART 3202 or permission of the instructor. Studio six hours.

#### ART 4307-SPECIAL TOPICS ADVANCED CLAY

An advanced self-directed study with in-depth individual research, exploration and production with regard to materials, processes and concepts. Emphasis is on critical thinking. Students are expected to create a body of work that demonstrates their level of knowledge, skills and abilities acquired in studies to date. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisites: two of the following Clay I courses: ART 2007, ART 2040, ART 2107; and one of the following Clay II courses: ART 3007, ART 3040, ART 3107. Studio six hours.

#### ART 4308-SPECIAL TOPICS ADVANCED FIBERS

A self-directed studio production course in fibers with additional research, presentations, and critiques with fibers faculty and other advanced students. The majority of goals and projects will be proposed by the students with the instructor's approval. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisites: three of the following fibers courses: ART 2008, ART 2602, ART 3017, ART 3208, ART 3308, ART 3408, ART 3508. Studio six hours.

#### ART 4309-SPEC TPC ADV MTLSTMTG JWLRY DSN

A self-directed advanced course of study in which the student will develop a contract with the instructor that includes project

descriptions, selected readings and deadlines. Critiques will take place in both group and individual settings. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisites: two of the following courses: ART 3009, ART 3109, ART 3110, ART 3111. Studio six hours.

#### ART 4312-GRAPHIC DESIGN PROF PRACTICE

Aimed at senior graphic design majors, ART 4312 (Graphic Design Professional Practice) is intended to help students transition from student to design professional. The course addresses professional practices in the context of various design disciplines as well as current issues in the field. Students will create self-promotional packages, undertake research and writing that reflects their preparedness for the job search; develop and refine their portfolios; and, if possible, visit a design studio or printing facility. Prerequisites: ART 3102 and ART 3202. Lecture and studio four hours.

#### ART 4325-SPEC TOPCS ADV PRINTMAKING

This course continues the investigation of techniques and directions introduced in beginning level printmaking courses. Students are expected to refine technical competency through the development of a cohesive body of work that articulates an inventive and conceptual use of the printed image and a clear personal vision. Emphasis will be given to examining advanced processes and contemporary issues in printmaking. Barring duplication of content, a student may repeat the course for a total credit of nine semester hours. Prerequisites: at least three of the following courses: ART 2025, ART 2125, ART 3225, ART 3325. Studio six hours.

#### ART 4326-ADVANCED PHOTOGRAPHIC DESIGN

An advanced course in fine art photography. This course is designed to allow students to work at an advanced level in photography, to enhance the aesthetic, intellectual and visual evolution of personal work and to hone critical skills and awareness of historical and theoretical issues in the field. A camera is required per the instructor's directions. Prerequisite: ART 3226 or permission of the instructor. Studio six hours.

#### ART 4351-STUDIO SEMINAR III

This senior seminar course prepares students for creating a coherent body of work in ART 4852 (Senior Studio). These two courses, taken in sequence, provide an opportunity for advanced students to demonstrate an emerging intellectual, visual and technical maturity in respect to their own work. Senior Seminar includes planning and writing an exhibition proposal; reading relevant art criticism and theory; writing a research paper; and documenting the progress of one's work through sketches, models, and oral presentations. This course is an opportunity for students to articulate meaningful ideas and integrate them with studio practice. Prerequisites: ART 3015 and completion of a minimum of 27 semester hours of studio electives. Prerequisite or corequisite: at least one of the following courses: ART 4300, ART 4301, ART 4307, ART 4308, ART 4309, ART 4325, ART 4326. (WRITING; SPEAKING)

#### ART 4510-SENIOR HONORS THESIS

Independent research and/or creative project. Honors thesis directed by a member of the Art Department and evaluated by a departmental committee. Prerequisite: completion of six semester hours of Art honors coursework.

#### ART 4551-STUDIO WORKSHOP

An intensive course to be offered in selected media such as drawing, printmaking, painting, photography, sculpture, clay, fibers, alloys, computer graphics, and others. Prerequisite: portfolio review or permission of the instructor.

#### ART 4852-SENIOR STUDIO

Senior Studio is the capstone studio experience for BFA Studio Art majors. This course carries on and brings to resolution the conceptual, technical and studio practices begun in Senior Seminar. Students will demonstrate an emerging intellectual, visual and technical maturity by producing a body of work for exhibition. Students will also write process statements and deliver a series of oral presentations critically analyzing their works in progress. This course addresses issues relevant to becoming a professional artist. A committee of three faculty members will evaluate each student's work. Prerequisite: ART 4351. Studio six hours.

#### COM 2101-PUBLIC SPEAKING

Intensive practice in composition and delivery of various types of speeches with emphasis on speech structure and style. (SPEAKING)

#### COM 2106-ARGUMENTATION & ADVOCA

Study of the theory of argumentation including the reasoning process; the use, discovery, and evaluation of evidence; refutation; advocacy situation analysis and adaptation. Practice in speaking in a variety of advocacy situations and types. Corequisite or prerequisite: COM 2101 or consent of the instructor. (WRITING; SPEAKING)

#### COM 2121-INTERPERSONAL COMMUNIC

Study and application of basic communication concepts to interactive communication situations and problems. Students will be involved in various activities pertinent to understanding these concepts.

#### COM 2131-HEALTH COMMUNICATION

An exploration of the role communication plays in health care delivery, health behavior change programs, and health communication career opportunities. The course is designed to increase understanding of the communication theories and research in patient/provider relationships, communication in health care organizations, media coverage of health, and health communication campaign planning and implementation.

#### COM 2180-COMMUNICATION THEORY

Study of communication theories, systems, models, formulations and measurements; new dimensions in speech criticism and research methodology; critical study of published reports in the contemporary literature of the field. Prerequisite: COM 1200.

#### COM 2300-INTRO MASS COMMUNICAT

Study of the forms of mass communication including newspaper, magazine, radio, television, books, and film. Corequisite or prerequisite: COM 1200 or consent of the instructor.

#### COM 2700-FDNS OF ADVERTISING

An introductory course that examines advertising as a form of communication. After a brief examination of history, role in the economy, external restraints and customer behavior, the course concentrates on theories and principles of media messages and management as well as advertising applications and trends.

#### COM 3117-ENVIRONMENTAL COMMUNICATION

The course is designed to encourage students to think critically about the meanings of environmental communication and the roles it plays in their lives and throughout the world. Students will also examine the recent history and development of environmental communication as an area of intellectual inquiry.

#### COM 3118-COMMUNICATING COAL APPALACHIA

The course examines the types of communication and information campaigns used by various stakeholders in the cultural, economic and political conflicts surrounding the coal industry in Appalachia. Students will learn through case studies, readings, guest speakers and at least one field trip to the coal fields of Appalachia.

#### COM 3124-INTERCULTURAL COMMUNICAT

Examines communication practices in multi-cultural settings including international, national, regional, ethnic, racial, economic, religious, and other topics of pertinence to effective intercultural communication. Students will be involved in observational activities and research activities to exemplify intercultural communication differences in a practical way. (WRITING; MULTI-CULTURAL; CROSSDISCIPLINARY)

#### COM 3131-HLTH COMM IN INTER SETTINGS

Theory and practice of health communication in interpersonal contexts, including patient-provider communication, social support, and communication in illness.

#### COM 3132-HEALTH AND MASS MEDIA

A course exploring the mass communication contexts of health communication, including health news, advertising, campaigns, and information seeking. The course is appropriate for the future health care professional, health communication professional, and health communication graduate student, patient, or health care consumer.

#### COM 3155-PERSUASION

This course explores the role of persuasion in public life. Students will learn to critically analyze and produce persuasive discourse in social, cultural, and democratic contexts in light of prevailing theories of social influence. Prerequisites: COM 1200 and COM 2101, or consent of the instructor; and ENG 2001 or its equivalent. (WRITING; SPEAKING)

#### COM 3300-MASS MEDIA & SOCIETY

A survey of the social impact of mass media. Analysis of issues such as mass media and individual behavior, violence and TV, media and consumers, and mass media and popular culture.

#### COM 3312-CRISIS COMMUNICATION

A study of the role of crisis communication in contemporary organizations. Emphasis is on critical assessment of organizational readiness for a crisis and advanced crisis preparation. Students prepare a crisis assessment and crisis management plan for an actual organization/business. Prerequisite: ENG 2001 or its equivalent. (WRITING)

#### COM 3315-POLITICAL COMMUNICATION

Examines the theoretical and practical aspects of political communication. Topics covered include political debates, speechwriting, political cartoons, communication strategies during and after campaigns, and the role of the media in political communication. (CROSS-DISCIPLINARY)

#### COM 3341-COMMUNICATION ETHICS

Study methods of applying logical concepts and techniques as well as ethical theories, principles, and techniques to professional communication fields. The course will also demonstrate the importance of ethics and of communication ethics to the student's personal and professional life. It will scrutinize and evaluate the fundamental issues and problems in communication ethics and examine the social responsibility of professional communicators.

Prerequisites: COM 1200 or permission of the instructor, and ENG 2001 or its equivalent.

(WRITING)

#### COM 3910-INTERNATIONAL EXPERIENCE

This course is designed to assist students in the department's international internship program as they prepare themselves for the experience of completing an international internship.

Prerequisite: open only to students participating in the department's international internship program. (MULTI-CULTURAL)

#### S D 2400-PRINC SUSTAINABLE DEVELOPMNT

This course is the foundation course for students interested in pursuing a major or a minor in Sustainable Development. The course will introduce students to the concepts and history of "development," the origins of concerns about "sustainability," and the marriage of these two ideas in the contested notion of "sustainable development (SD)." From that basis, the course will then examine the understanding and use of SD principles in and from various disciplinary and multi/interdisciplinary perspectives. (CROSS-DISCIPLINARY)

#### S D 2600-SCIENCE FOR SUSTAINABILITY

This course is an introduction to the study of the natural sciences as they can be applied to the concepts of sustainability. The basic principles of science studied include: energy; matter; ecology; population growth; carrying capacity; decreasing biodiversity; resource depletion; climate change; and chemical pollution of air, water, and soils. Lecture three hours, laboratory three hours. (WRITING; SPEAKING; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### S D 2800-ENV JUSTICE & SUSTAINABILITY

This course is a study of relationships between the environmental justice movement and sustainable development. Working at the intersection of these fields, students will gain an understanding of an egalitarian conception of sustainable development known as "Just Sustainability." Students will examine the history of the "Just Sustainability" paradigm; critically analyze questions of race, class, gender, place, and labor as they relate to "Just Sustainability" and the stakeholder theory; and read, evaluate and create case studies.

#### S D 3170-PRINCIPLES OF AGROECOLOGY

This course will focus attention on agricultural systems from an ecological perspective and how such systems can contribute to a more sustainable society. Topics covered in the class will include basic ecological concepts (i.e., the biological, chemical, and physical factors and their interactions) and their application to agricultural systems, production and consumption aspects of food systems, and will address ways to facilitate the promotion of sustainable agriculture. Lecture three hours.

#### S D 3170-PERMACULTURE DESIGN

Permaculture is a design science using ethical and biophysical principles combined with scientific methods of observation of nature to create systems that sustainably meet human needs while supporting relevant social, ecological, and economic infrastructures. In this course, students will explore permaculture philosophy and its relevance to the modern world system, while providing students with practical skills and tools to assess specific sites and create holistic designs suited to the objectives and needs of stakeholders. Prerequisite: SD 3100 or permission of the instructor. Lecture two hours, laboratory three hours.

#### S D 3150-SOIL & SOIL FERTILITY MGMT

In sustainable agriculture, soil health and quality are recognized as key to producing bountiful and nutritious food. A thorough understanding of the nature, properties, and ecology of soil are therefore necessary to the design and management of agroecosystems in which the long-term fertility and productive capacity of the soil is maintained, or even improved. This understanding begins with knowledge of how soil is formed and includes integration of all biological, chemical and physical factors, as well as components that determine soil quality and contribute to the structure and function of the entire soil ecosystem. From this foundation, students will then study how to assess soil quality and how to develop appropriate soil and soil fertility management plans using organic production methods. Lecture three hours, laboratory two hours.

#### S D 3200-AGROFOREST & FARM FOREST SYST

Agroforestry has been defined by the World Agroforestry Center (2000) as "a dynamic, ecologically based management practice that integrates trees and other tall woody plants in the agricultural landscape to diversify production for increased social, economic and environmental benefits." This course will focus on how the principles, complexity and diversity of agroforestry systems enhance land productivity and sustainability. The social and economic benefits of such systems for farmers, communities and society will also be discussed. Emphasis will be on temperate zone agroforestry systems, in particular those suitable for, or having potential for, northwest North Carolina. As these systems are much more extensive in (sub)tropical areas, agroforestry systems in those areas will also be briefly reviewed. The main emphasis of the course will be plant (crop) and soil aspects and component interactions, both above and below ground and from spatial and temporal perspectives. Lecture three hours. Prerequisite or corequisite: SD 3100.

#### S D 3250-LIVESTOCK PRODUCTION & MGMT

This course is a survey of the livestock industry, the supply of animal products, and their uses. A special emphasis is placed on the origin, characteristics, adaptation and contributions of farm animals to sustainable agriculture, managing productivity, and minimizing ecological impact of agricultural systems. Prerequisite or corequisite: SD 3100. Lecture three hours.

#### S D 3300-FARM BUSINESS MANAGEMENT

This course introduces students to the principles and tools of managerial analysis and decision-making for the profitable operations of farms and farm-related businesses. Emphasis is given to planning, implementing, directing, organizing and controlling a farm business. Topics include financial statements; business analysis; budgeting; acquisition; organization and management of capital, labor, land, buildings and machinery; investment analysis of business-related improvements; and tax implications for management. Through case studies and real-world examples, students will learn to apply micro-economic and agricultural production theories, optimize allocation of resources and products, analyze resource shifts in agricultural production, as well as understand pricing and marketing issues of farm products. Economic concepts useful for management decisions will be reviewed and applied.

#### S D 3350-CONTEMP ISSUES AGRICULT FOOD

This course will analyze, reflect on, and evaluate current agricultural issues. Examples of probable issues include the industrialization of the agriculture/food system, water rights, sustainable/local/organic agriculture, world hunger and food aid, saving the family farm, food safety, foreign agricultural assistance, the future of farming and food systems, genetic engineering, and others. Alternative perspectives on the issues and policy implications will be discussed. Barring duplication of content, a student may repeat the course for a total of six credit hours.

#### S D 3375-SUSTAINABILITY ECON DEVELOP

This course will provide students with the theoretical and practical tools needed to explore economic issues from the perspective of sustainable development. The course introduces basic concepts underlying various approaches to economic analysis; applies these concepts critically to current issues such as globalization, poverty, and environmental degradation; and explores alternatives through the critical analysis of their sustainability.

#### S D 3400-DEVELOPMENT & UNDERDEVELOPMENT

This course provides an overview of major contemporary perspectives on development and underdevelopment, examined through the critical lens of sustainability. Applications to particular topics and alternative models are considered in terms of their effects on people and environment. Prerequisite: junior standing or permission of the instructor.

#### S D 3450-FARMWORKERS

An interdisciplinary survey of the forces shaping contemporary farmwork and the lives of farmworkers in the United States, with particular attention to North Carolina. Topics include demographics, historical context, labor markets, agricultural structure and agribusiness, the global economy, immigration, health and occupational safety, legal issues, education, working conditions, and community and labor organizing.

#### S D 3520-INSTRUCTIONAL ASST

A supervised experience in the instructional process on the university level through direct participation in a classroom situation. Graded on an S/U basis. Prerequisite: junior or senior standing. May be repeated for a total credit of three semester hours.

#### S D 3600-ENVIRONMENTAL HUMANITIES

Humanity's relationship to the natural world is embedded in our cultures and manifested in such cultural constructions as philosophy, religion, aesthetics, literature, and the humanities in general. This course introduces students to a humanities-based study of nature and culture.

#### S D 3750-NATURE, TECHNOLOGY, & ENV

This course is a targeted, in-depth, and critical analysis of technology as social production and construction with specific attention to its influence on sustainable development. This course explores the social relationships embodied in technological systems, the inter-relationships between technology and sustainable development, and relevant historical and contemporary examples. Prerequisite: TEC 2029.

#### S D 3800-CLASSICS SUSTAINABLE DEVELOP

An exploration of landmark texts in the field of sustainable development; whole books will be examined in their biographical, sociohistorical, and critical contexts in order to deepen knowledge of significant voices in the discourse of sustainability. Prerequisites: ENG 2001 or its equivalent, and junior standing or permission of the instructor. (WRITING; SPEAKING)

#### S D 3900-PRACTICUM IN SUSTAINABLE AGR

This is a hands-on course focusing on the practice of sustainable agriculture. Students will engage agricultural systems from an ecological perspective, explore the biodiverse system of a natural working farm, and understand how such systems contribute to a more sustainable society. We will explore basic ecological concepts (i.e., biological, chemical, and physical factors and their interactions with plants and animals) and their application to agricultural systems, as well as the production and consumption aspects of food systems. Specific topics covered during group meeting sessions will include organic soil health, organic fertilization methods, animal husbandry, pest and disease management, methods to increase biodiversity in the agroecosystem, season extension, cover cropping, composting methods, and agroforestry, as well as marketing and community involvement. Independent work time at the Sustainable Development Teaching and Research Farm is integral to this course. Prerequisite: SD 3100.

#### S D 4100-AGROECOLOGY PRACT SYST PHILO



This course will provide an in-depth exploration of (1) the ethical and philosophical roots of conventional and alternative agriculture; and (2) the biological, economic and social aspects of different agricultural systems and practices developed in response to perceived shortcomings of conventional modern agriculture. Alternative practices and systems to be compared and contrasted in this course include nature farming, permaculture, biodynamic agriculture, biointensive gardening, and agroforestry (additional systems and practices may be added or substituted based on class interest and consensus). Prerequisite: SD 3100.

#### S D 4125-APPLIED FARM OPERATIONS

This is the second required course in the Applied Farm Operations sequence. This course is an advanced field experience at the Sustainable Development Teaching and Research Farm. Students will work as crew leaders on the farm, assisting with skills training and facilitating farm activities while increasing their knowledge of the art, science and management aspects of small scale sustainable, ecological agriculture. Open to Sustainable Development majors in the Agroecology and Sustainable Agriculture concentration only. Prerequisites: SD 3100 and SD 3125. Prerequisites or corequisites: SD 3150 and SD 3250.

#### S D 4200-ECOLOGICALLY-BASED PEST MGMT

Applied principles of ecologically-based Integrated Pest Management in agricultural, landscape and other environments. Cultural, biological, mechanical/physical, preventive, and organically approved chemical control methods will be featured, with an emphasis on practical ecosystem-based strategies that feature biologically-based controls as the cornerstone of ecological pest management. Prerequisite: SD 3100. Lecture three hours, laboratory two hours.

#### S D 4401-APP IN SUSTAINABLE DEVELOPMENT

An intensive study of special problems, topics, or issues related to the implementation of sustainable development, with emphasis on the evaluation of real-world case studies. The subject matter of this course will vary and barring duplication of subject matter, a student may repeat the course for credit. Prerequisite: SD 3375 or SD 3400.

#### S D 4510-THESIS/PROJECT

In this course, students will be required to complete a thesis/project that makes use of and integrates the material from the sustainable development core in relation to a significant issue in sustainable development. Students may either write a thesis or conduct a final project, which will be supervised by a member of the sustainable development faculty and read by another Appalachian State University faculty member in a field appropriate to the topic selected by the student. Prerequisite: student must get approval from an advisor of the Sustainable Development department prior to enrolling.

#### S D 4550-SENIOR SEMINAR

Review, synthesis, reflection, and elaboration on aspects of sustainable development. Designed as a final on-campus opportunity for students to synthesize and integrate the theories and practices that inform sustainable development, to test their ideas in conversation, to connect their individual work with the work and ideas of others, and to examine career opportunities related to sustainability. Variable content. Ideally should be taken during the final semester of on-campus study. Required for majors. Prerequisite: Sustainable Development major with senior standing or permission of the instructor.

#### S D 4900-INTERNSHIP/PRACTICUM

Supervised work in an appropriate field experience. A critical means to apply theoretical constructs, methods and techniques learned in the classroom to real-world settings. The practicum offers ways of acquiring practical work experience and it provides opportunities to engage in community organizations, non-governmental and governmental organizations, and businesses that seek to advance sustainability in specific ways. The internship/practicum may occur at the local, regional, state, national or international levels. The practicum is an important part of the program's commitment to sustainable development in the wider world. Prerequisite: student must get approval from an advisor of the Sustainable Development department prior to enrolling. Graded on an S/U basis.

#### S D 4910-ADV INT IN AGROECOLOGY

An internship in a commercial setting, research laboratory, or research facility; or in a federal, state, or local government or nongovernment agency. Students will be expected to complete a significant project developed in conjunction with the cooperating outside facility or agency, will keep a daily journal of their internship experience, and will report the results of their internship in a public seminar as well as a written report. Prerequisites: SD 3900 and approval of the Sustainable Development advisor. Graded on an S/U basis.

#### S D 5050-FOUNDATIONS SUSTAIN DEVELOP

This course presents a broad foundation in sustainable development. It demonstrates the transdisciplinary and polymethodic character of sustainable development, and provides an introduction to the relevance of a variety of disciplines, such as economics, bio-physical sciences, ethics, appropriate technology, cultural anthropology, and planning to this transdisciplinary nexus. Students will also be introduced to the significance of method in generating knowledge, and to the challenges involved in integrating information generated by means of differing methods. Students will explore the foundations of sustainable development historically, economically, scientifically, and cross-culturally. Students will be introduced to professional opportunities in sustainable development and begin research in internship opportunities.

#### S D 5100-AGROECOLOGY PRACT SYST PHILO

This course will provide an in-depth exploration of (1) the ethical and philosophical roots of conventional and alternative agriculture, and (2) the biological, economic and social aspects of different agricultural systems and practices developed in response to perceived shortcomings of conventional modern agriculture. Alternative practices and systems to be compared and contrasted in this course include nature farming, permaculture, biodynamic agriculture, biointensive gardening, and agroforestry (additional systems and practices may be added or substituted based on class interest and consensus). In laboratories, students will have the opportunity to (1) learn about, and gather basic data on the biophysical, ecological and social aspects of the Sustainable Development Teaching and Research farm that are necessary to start and operate a garden based on sustainable principles; (2) combine theory and practice of vegetable, fruit and/or small animal production using a 'learning-by-doing' approach; and (3) provide leadership to work teams of students on the farm. Lecture three hours, laboratory three hours.

#### S D 5300-ISSUES IN GLOBAL SCIENCE

This course involves an examination of the nature of science in relation to sustainability, including scientific method and various methods of investigation, data collection, analysis, and presentation; basic principles of science including time, change, space, and energy; biological issues such as population growth and carrying capacity, deforestation, decreasing biodiversity, and changing ecosystems; geological issues such as coastal flooding associated with global warming, resource depletion, and chemical pollution of water and soils; and meteorological and climatological issues such as ozone depletion, and climate change, including global warming. Prerequisites: a one-year sequence of General Science, Biology, or Chemistry, plus one sophomore or higher level course in environmental science, or the equivalent of these.

#### DAN 1400-MODERN DANCE I

An introduction to modern dance as an art form with the beginning practice of movement technique. Emphasis will be on the discovery of skills to develop the articulation and expressiveness of the body. The course will be an introduction to the medium of modern dance through the concepts of time, space, force and direction while integrating alignment and placement. Historical perspectives as well as aesthetic values will be covered. May be repeated one time for credit. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 1410-BEGINNING BALLET I

A beginning study of the art of classical ballet with emphasis on basic vocabulary, alignment/placement, classical historical traditions and basic combinations of movement. May be repeated one time for credit. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 1420-JAZZ I

A study of beginning jazz dance technique with an emphasis on rhythmic awareness, style and cultural traditions. May be repeated one time for credit. Prerequisite: DAN 1400 or DAN 1410. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 2020-WORLD DANCE

This course will explore dance as a vital contribution to cultural understanding from various regions and cultures around the world including the Americas, Africa, Europe, Asia and Oceania.

#### DAN 2030-DANCE, MEDIA, & CULTURE

This course will focus on the intersection of dance, media and culture by contextualizing an emerging role of dance from an elitist perspective to a populist activity. Content will include a global perspective of dance on film, technological advances in digital dance media and the creation of fusion dance forms as a means of cultural expression.

#### DAN 2106-PERFORM ACTIVITY: DANCE

Performance activity is available to all students by audition for dance ensemble. May be repeated for credit. A maximum of two semester hours of credit in DAN 2106 will apply toward graduation.

#### DAN 2107-PRODUCTION RUNNING CREW

Production running crew is available to all students. Specific jobs and hours will be arranged with the instructor. May be repeated for credit. A maximum of two semester hours of credit in DAN 2107 will apply toward graduation.

#### DAN 2400-MODERN DANCE II

A second (intermediate) level study of modern technique and basic elements of dance with more emphasis given to the refinement of skills and aesthetic elements. May be repeated one time for credit. Prerequisite: DAN 1400 or permission of the instructor. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 2410-BALLET II

A beginner/intermediate class in classical ballet technique designed to facilitate skill in allegro and adagio work with an emphasis on developing line, style, placement and musicality. Focus will be on expanding the dancer's artistry through the development of articulation, precision and conditioning. May be repeated for a total credit of four semester hours. Prerequisite: permission of the instructor. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 2420-JAZZ II

A second level study of jazz technique and advanced elements of dance with more emphasis given to the refinement of skills including rhythmic awareness and dynamic interpretation. May be repeated one time for credit. Prerequisite: DAN 1420 or permission of the instructor. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 2600-FLOOR BARRE

A study of the innovative technique based on the teachings of originator and founder, Zena Rommett. This class will help develop correct alignment, maximum turn-out, and improve balance as well as refine movement skills and increase vitality. May be repeated one time for credit. Prerequisite: permission of the instructor.

#### DAN 2610-POINTE

An intermediate to an advanced level study of the art of pointe work in the area of classical ballet technique, facilitating pointe skill in allegro and adagio work with an emphasis on developing line, style, placement and musicality. Focus will be on expanding the dancer's artistry through the development of footwork while strengthening ankles and legs with movement articulation, precision and conditioning. May be repeated one time for credit. Prerequisite: concurrent enrollment in a technique class or permission of the instructor.

#### DAN 3280-YOGA AS SOMATIC PRACTICE

This course will examine the basic principles of the physical practice of yoga known as Hatha Yoga. The course will explore the practice of asanas (sustained postures) and vinyasas (sequences of postures connected by breath), pranayama (breathing exercises) and pratyahara, (meditation practices). Students will also be introduced to the philosophical and historical context of Hatha yoga. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 3400-ADVANCED DANCE TECHNIQUE

The course will explore the elements of rhythm, space, time and effort in advanced dance technique. Focus will be on expanding the dancer's artistry through the development of articulation, precision and conditioning. Students will be expected to learn movement quickly and accurately. May be repeated for a total of four semester hours credit. Prerequisite: permission of the instructor.

#### DAN 3405-MODERN DANCE III

An advanced level study of modern technique with emphasis on continued refinement of skills, aesthetics, and the performance of complex combinations. May be repeated for a total of 6 s.h. credit. Prerequisite: DAN 2400 or permission of the instructor.

#### DAN 3410-BALLET III

An intermediate/advanced class in classical ballet technique designed to facilitate progressive skill in the execution and performance of complex combinations of adagio and allegro work with an emphasis on refinement of line, style, placement, and musicality. Focus will be on continued expansion of the dancer's artistry through development of articulation, precision, and conditioning. Prerequisite: permission of the instructor. May be repeated for a total credit of four semester hours.

#### DAN 3435-DANCE HISTORY IN MODERN ERA

Contemporary Dance History will explore concert dance styles from the 20th century to the present day. Special emphasis will be given to cultural, aesthetic and philosophical influences on contemporary concert dance.

#### DAN 3450-DANCE PEDAGOGY

This course will explore methods and theories of dance education through didactic and experiential means including lecture, observation, labs, practical teaching experiences, and feedback sessions. Lecture three hours, laboratory one hour. Prerequisite: DAN 1400 or DAN 1410 or DAN 1420 or permission of the instructor.

#### DAN 3480-PILATES CONDITIONING I

This course is an experiential course based on the principles and teachings of Joseph H. Pilates. The Pilates method combines both Eastern and Western approaches to physical and mental conditioning with an emphasis on moving with maximum efficiency and precise control. May be repeated one time for credit. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 3580-GYROKINESIS

Gyrokinesis methodology, as developed by Julio Horvath, embraces key principles of dance, yoga, gymnastics and tai-chi. The method works the entire body using spinal articulations and undulating rhythms integrated with specific breathing patterns. (CORE: PHYSICAL ACTIVITY/WELLNESS)

#### DAN 4405-MODERN DANCE IV

A fourth level study of modern dance technique that builds refined and nuanced technical skills, aesthetics, and performance of complex movement sequences. May be repeated for a total credit of four semester hours. Prerequisites: DAN 3405 and permission of the instructor.

#### DAN 4420-CHOREOGRAPHY

The course will focus on the increased awareness of design, dynamics, rhythm and motivation. Special attention will be given to design elements for small groups. There will be continued work in the observation, analysis and appraisal of dances. The class will culminate in a duet or trio choreographic work. Prerequisite: DAN 3420. May be repeated for a total of three semester hours credit.

#### DAN 4460-SOMATICS

This course will focus on functional anatomy and kinesiology to explore different approaches to therapeutic body-centered learning and current concepts in wellness. The course will be lecture and experiential in nature. (CORE: PHYSICAL ACTIVITY/WELLNESS) [Dual-listed with DAN 5460.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### DAN 4480-PILATES CONDITIONING II

A second level study of the Pilates method, based on the concepts of centering, concentration, control, precision, breath and flow. This course will introduce the equipment and the apparatus developed by Joseph H. Pilates. May be repeated one time for credit. Prerequisite: DAN 3480 or permission of the instructor. [Dual-listed with DAN 5480.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### DAN 4510-SR HONOR THESIS/PROJECT

Independent study and research for a dance studies thesis or project. Directed and graded by a dance faculty member in the Department of Theatre and Dance. (By invitation or application only.)

#### DAN 4580-GYROTONIC

Gyrotonic methodology, as developed by Juliu Horvath, embraces key principles of dance, yoga, gymnastics and tai-chi. The method works the entire body using spinal articulations and undulating rhythms integrated with specific breathing patterns. This second level study incorporates the GYROTONIC® apparatus. May be repeated for a total credit of four semester hours. Prerequisite: DAN 3580.

#### DAN 4830-COLLABORATIVE PROCESS

This course will explore the collaborative process in dance. Histories of great collaborations will be explored. Theoretical perspectives of creative process, the nature of creativity in collaborative work, crossing disciplines, and group process will be addressed. The course will be lecture, discussion and experiential in nature. Research projects and collaborative projects will be presented orally. Prerequisites: senior standing and permission of the instructor; and ENG 2001 or its equivalent. (WRITING; SPEAKING)

#### DAN 4840-CAPSTONE

Capstone is the culminating course requirement for the Bachelor of Arts degree in Dance Studies. It is an opportunity for the student to explore and discover the connections between the discipline of dance and another selected area of study. Students will be expected to create an in-depth senior project which illustrates and focuses on this resulting integration of disciplines. Students will be required to present and discuss the development as well as other aspects of their project in class, and they will also be required to present their final project in a public forum to students and faculty. A written synthesis of the process and project reflecting on the student's ability to create meaningful connections between disciplines is also required. Prerequisites: senior standing and permission of the instructor.

#### DAN 4870-CREATIVE PROC, MOVEMN & THER

An examination of body awareness, creative expression, and movement in therapy. Particular attention will be paid to the concept of creative process and how it relates to human development, personality integration, and healing. [Dual-listed with HPC 5870.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### DAN 5460-SOMATICICS

This is a survey course exploring several different approaches to body-centered learning. A broad overview of current conditioning and therapeutic bodywork methods will be introduced and explored. The course will be lecture and experiential in nature. [Dual-listed with DAN 4460.]

#### DAN 5480-PILATES CONDITIONING II

A second level study of the Pilates method, based on the concepts of centering, concentration, control, precision, breath and flow. This course will introduce the equipment and the apparatus developed by Joseph H. Pilates. May be repeated one time for credit. Prerequisite: DAN 3480 (Pilates Conditioning I) or permission of the instructor. [Dual-listed with DAN 4480.]

#### THR 2009-THE STAGE ENVIRONMENT

In this class, students will explore the fundamental principles and processes of designed environments for performance. Students will engage in design research, analysis, interpretation, and critique. Emphasis will be on developing creativity by participating in individual and collaborative projects.

#### THR 2017-THEATRE FOR SOCIAL CHANGE

This course is a practical and seminar class focused on the history and theory behind "theatre for social change" and is grounded in participation, research, analysis, and performance. Students study and apply various theories and methodologies of theatre for social change (image, forum, playback, invisible theatre, etc.) to effect change related to social, economic, cultural, political, and interpersonal issues.

#### THR 2020-WORLD CULTURE & PERF STUDIES

This course applies insights from performance art, theatre, dance and other art forms. Its interdisciplinary approach will allow students to have the opportunities to study the unique role of "performance" in various aspects of our society as well as the world today. The class will explore the concept of performance, and special attention will be paid to issues of multiculturalism and the cultural, political, historical, social, economic and technological contexts of performance studies.

#### THR 2022-CLTVG CRTV EXPRSSN THRGH THTRE

The emphasis in this course is on understanding and creating theatre as a springboard for more deeply understanding and developing personal creativity. Students will be immersed in an integrated approach to developing theatre artistry through watching, reading and analyzing plays; engaging in the creative process of playmaking and playwriting; and participating in the collaborative process of theatre production. No prior theatre skills necessary. Lecture and studio lab.

#### THR 2101-PRODUCTION RUNNING CREW

Production running crew is available to all students. Specific jobs and hours will be arranged with the instructor. May be repeated up to four times for credit. Prerequisite: permission of the instructor.

#### THR 2214-DANCE PRODUCTION BASICS

An introduction to the techniques of stage production in costume, stage lighting, and stage sound. Coursework will include the understanding of basic design principles, appropriate paperwork, organization, use of equipment, construction/installation techniques, and safety. Students will participate in a variety of production activities.

#### THR 2230-SCENERY & PROPERTIES

Introduction to the techniques used to design and execute stage scenery and properties including equipment, facilities, basic design techniques and documentation. Students will participate in scenic studio activities.

#### THR 2235-THEATRICAL COSTUME & MAKEUP

#### THR 2250-STAGE MANAGEMENT

The study of the procedures and techniques used to stage manage a theatrical production from auditions through the final performance. The unique aspects of stage managing in the university and professional environments will be considered. Prerequisite: permission of the instructor.

#### THR 2445-ARTS MGT & PROMOTION

The theory and practice of business management, promotion and publicity, fund raising, ticket sales, and box office management as applied to the performing arts. Lecture and demonstration three hours.

#### THR 2625-VOICE & MOVEMENT FOR STAGE

#### THR 2635-STAGE COMBAT

An introduction to the use of combat in theatrical productions. Course work will include safe approaches to weapon and hand-to-hand combat, appropriate weapon choices, text and fight analysis, rehearsal discipline, and basic fight choreography. Prerequisite: THR 2605.

#### THR 3071-TEACHING THEATRE, 9-12

Methods for teaching theatre in the 9-12 classroom. This course includes strategies, organization and administration for classroom and production activities in theatre arts. Experiences include developing lesson plans and actual high school teaching experience. It is strongly advised that all requirements for licensure (except student teaching) be completed prior to taking this methods course. Prerequisite: THR 4356. (Same as CI 3070.)

#### THR 3225-ADVANCED STAGE MAKEUP

Advanced techniques in stage makeup for a variety of production situations. Techniques to be covered include scars, burns, stage blood, latex, and other three-dimensional techniques. Lecture and laboratory two hours. Prerequisite: THR 2225 or permission of the instructor.

#### THR 3625-ADVANCED VOICE TECHNIQUES

#### THR 3630-THEATRE DIRECT TECHNIQUES

Basic directing techniques including script analysis, production planning, blocking and working with the actor. Practical applications of the principles of directing. Prerequisites: THR 2009 and THR 2620.

#### THR 3635-ALEXANDER & ADV MOVEMENT TECH

#### THR 3640-SOLO & GROUP PERFORMANCE

An introduction to performance studies, using the principles of oral interpretation. The course begins with the training of the body, voice, and sense memory as well as an introduction to dramatic analysis. The second part of the course uses these performance instruments for solo rehearsal and presentation of student selected literary texts: description, narrative, drama and poetry. The course concludes with ensemble performances of literary texts. (SPEAKING) (CORE: HUMANITIES)

#### THR 3650-ALEXANDER TECHNIQ FOR STAGE

A course that explores the awareness of self, ease and improved coordination in movement, and stage presence through the principles of the Alexander Technique.

#### THR 3656-THEATR PERF PROD YNG AUD

This course will explore techniques and theories of producing plays for young audiences using children, youth and adults. Course work will emphasize practical demands of productions in a variety of organizational settings. Students will produce and tour a production for young audiences. This course is designed for students majoring in theatre, education and recreation. May be repeated for a total credit of six semester hours. Prerequisite: THR 2007 or permission of the instructor.

#### THR 3670-PLAYWRITING

A study of the art and craft of writing for performance. Readings will include plays, performance theory, and performance reviews. The course will be run as a workshop in which every student must be an active participant in evaluating her or his own work and that of others. Assignments will include written work, oral presentations, workshop evaluations, and performances. May be repeated for credit when content does not duplicate. This course serves as a prerequisite for ENG 3662, ENG 3663, and ENG 4550. (Same as ENG 3670.)

#### THR 3735-MODERN THEATRE HISTORY & LIT

This course explores the history, literature, and criticism of the theatre in the modern period through the present. The course will focus predominantly on American and European theatre, but will also include some African, South American, and Asian theatre. Prerequisites: THR 2005, THR 3730, and ENG 2001 or its equivalent. (WRITING; MULTI-CULTURAL; CROSS-DISCIPLINARY) (CORE: HUMANITIES)

#### THR 3856-TEACHING THEATRE, K-5

Introductory methods for using creative drama in the K-5 classroom and other settings. This course aids the potential K-5 teacher in using drama as a teaching tool, and it includes practical experience in the classroom. Prerequisite: CI 2300.

#### THR 4220-STAGE COSTUME DESIGN

The elements of design in relation to costume design through a series of historical and problem oriented projects. Emphasis will be placed on imagination, problem solving and growth in both the graphic interpretation and presentation of work. Prerequisites: THR 2009 and THR 2220.

#### THR 4230-SCENIC DESIGN

A study of the theory and processes used for the design of theatrical settings for a variety of productions. Prerequisites: THR 2009 and THR 2230.

#### THR 4235-SPEC TOPIC DESIGN & PROD



The study of advanced design and production topics in a variety of production forms and styles. May be repeated two times for credit. Prerequisite: permission of the instructor.

#### THR 4357-TEACHING THEATRE, 6-8

Advanced methods for using creative drama in the 6-8 classroom and other settings. Research and exploration of current approaches in the creative drama field. Emphasis is placed on the transition from process to product. This course includes practical experience in the classroom. Prerequisite: THR 3856.

#### GRA 3518-SUSTAINABILITY FOR PRINT PROD

#### GRA 4622-CURR TRENDS GRAPHIC COMM SEM

This course is designed to emphasize current trends, technical movements and problems as they relate to the future of the printing industry. Classes will focus on group discussions related to these and other current issues. Students will be required to refer to academic experiences, internship experiences and library skills to participate in discussions. Prerequisite: senior standing. Laboratory two hours. (WRITING; SPEAKING) [Dual-listed with GRA 5622.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### GRA 4722-PACKAGING PROTOTYPE STUDIO

#### IND 2012-PRODUCT DESIGN

This is an introduction to product design and problem-solving techniques. Emphasis is given to history of industrial design, methods for communicating design ideas, systematic design, product design specifications, corporate strategies in planning product innovations, fundamentals of materials and manufacturing processes used in the mass production of consumer products. Students will write multiple reports and give oral presentations throughout the semester. Selected assignments from this course will be appropriate for inclusion in student portfolios. Lecture three hours. (WRITING; SPEAKING)

#### IND 2120-MATERIALS & PROCESSES I

This course is an introduction to different materials and how to process them. Discussion of characteristics and the nature of materials might include: woods, metals, plastics, rubbers, concrete, fibers and ceramics. In addition, students will be exposed to a variety of processing techniques for these materials. Studio six hours.

#### IND 2311-HUMAN FACTORS IN DESIGN

The study of human capabilities and the design of parameters to fit an environment, task or product. Topics include the range and application of human measurements and senses. The course also addresses ergonomic design and design for challenged individuals. Lecture three hours.

#### IND 2321-PHYSICAL PRINCIPLES DESIGNERS

This course studies a broad array of physical principles useful for design. Topics include: heat transfer, thermodynamics, power mechanics, electronics and electricity, material science, strength of materials, statics, dynamics, and acoustics. The topics are covered as an overview with application examples. Students are expected to solve various design problems and give portfolio quality presentations to the class. Lecture two hours, laboratory two hours.

#### IND 3120-MATERIALS & PROCESSES II

This course is an advanced investigation into materials and techniques. Students are exposed to a variety of hands-on methods in a breadth of materials. Materials covered may include plastic, wood, metal and resins. Processes covered may include: rapid prototyping, computer numerical control, thermoforming, mold-making, casting, extrusion, injection and blow molding. Topics discussed may include: design for manufacturing, snap-fit design, design for disassembly, design for reuse, and the cradle to grave vs. cradle to cradle design theory. Prerequisites: IND 2120 and IND 2901. Studio six hours.

#### IND 4557-DESIGN FOR MANUFACTURE

The design, development, and mass production of a manufactured product. To include market survey, design selection, prototype construction, development of jigs and fixtures, and implementation of process planning and control systems. Lecture two hours, laboratory two hours. Prerequisite: IND 3701 or permission of the instructor. (SPEAKING) [Dual-listed with IND 5557.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### INT 1100-INTERIOR DESIGN STUDIO I

Foundation studio course, explores the fundamentals of interior design including the design process, principles and elements. Investigates problem-solving techniques through a variety of small-scale two and three-dimensional projects. Introduces critical thinking, analysis and communicating volumetrically. Includes creative problem-solving, process drawing, quick sketching and rendering, and modelmaking. Provides exposure to green design and team design. Prerequisites: INT 1001 and INT 1300. Corerequisite: INT 1002 or permission of the instructor. Studio six hours.

#### INT 1300-DESIGN & THE BUILT ENVIRONMENT

Provides a survey of the interdisciplinary design professions and their impact on culture and human behavior. Includes case studies of the built environment. Lecture three hours.

#### INT 2100-INTERIOR DESIGN STUDIO II

Introductory studio, focuses on application of design principles and elements in shelter interiors. Provides exposure to universal design principles, special populations, green design, social responsibility, human factors, kitchen and bath standards and specifications. Emphasizes critical thinking, space planning, circulation, and spatial analysis. Typical projects may include small and medium-scale residential and multi-family interiors. Prerequisite: completion of the Freshman Portfolio Review. Studio six hours.

#### INT 2110-INTERIOR DESIGN STUDIO III

Intermediate-level studio, focuses on systems design. Explores problem identification, research, functional analysis, programming methods and space planning theory. Investigates codes, and the integration of building systems. Includes theories of circulation, systems, application of ergonomics, ADA, building codes, ceiling systems, and specifications. Typical projects may include mediumscale work, retail and exhibition spaces. Extends analytical and strategic thinking. Prerequisites: INT 2100 and must be a declared INT major. Studio six hours.

#### INT 2200-INTERIOR DESIGN SYSTEMS I

Provides basic understanding of interior building products with focus on materials and finishes. Also includes systems furniture, architectural wall systems, and ceiling systems. Investigation and analysis of properties, selection criteria, costs, maintenance, specifications, codes, performance testing, sustainability, and life-cycle costing. Prerequisite: completion of the Freshman Portfolio Review or permission of the instructor. Lecture three hours.

#### INT 3100-INTERIOR DESIGN STUDIO IV

Intermediate-level studio, focusing on global design in commercial environments. Course provides application of human environmental studies, multi-cultural studies, advanced graphics, space planning, lighting and green design. Typical projects may include hospitality facilities (hotels, resorts, restaurants), healthcare facilities, and retirement facilities. Prerequisite: INT 2110. Studio six hours. (SPEAKING)

#### INT 3110-INTERIOR DESIGN STUDIO V

An advanced studio which focuses on problem-solving skills related to collaborative design. The course further develops concept writing, process drawing, space planning, design development, lighting, detailing, branding and consumer studies, multi-cultural issues, and green design understanding. Typical projects include medium-scale retail, showroom, exhibit design, and hospitality spaces. Prerequisite: INT 3005. Studio six hours.

#### INT 3320-ENVIRONMENT & HUMAN BEHAVIOR

Explores interrelationships between human behavior and the built-environment. Emphasizes synthesis of empirical research, analysis, mapping, design guidelines, programming, written documentation, and post-occupancy-evaluations. Study may include proxemics, human factors, social behavior, stressors and other prominent areas of research. Analysis may include residential or commercial spaces. Current topics may include placemaking, global issues, culture, defensible space. Prerequisites: completion of the Freshman Portfolio Review and ENG 2001 or its equivalent. Lecture three hours. (WRITING)

#### INT 4100-INTERIOR DESIGN STUDIO VI

Advanced studio, focuses on socially conscious design (design intervention). Includes programming and client issues, application of green design and social design. Typical projects may include service-based learning for non-profits (educational and communitybased organizations). Prerequisite: INT 3105. Studio eight hours.

#### INT 4108-STUDIO VII PRE-DESIGN

This course focuses on pre-design phases for the senior project. Content may include project proposals, comprehensive research, programming, codes analysis, project management, site analysis, building identification and other pre-design issues. The course stresses the importance of pre-design work in the overall design process, with emphasis on current periodicals, references and literature. Prerequisite: INT 3105. Lecture one hour.

#### INT 4110-INTERIOR DESIGN STUDIO VII

Final in a series of studios focusing on in-depth individual interior design projects. Emphasizes research, programming, comprehensive design, documentation and detailing. Typical projects may expose students to historic preservation, adaptive reuse issues, green design and incorporates advanced technical, analytical and theoretical problem-solving methods. Prerequisite: INT 4100. Corequisite: INT 4320. Studio eight hours.

#### INT 4301-CURR ISSUES INTERIOR DESIGN

Explores current issues and trends in interior design. Emphasizes synthesis of research and critical thinking for creative problemsolving. Topics vary from year to year. May be repeated for credit when content does not duplicate. Prerequisite: INT 3105. Lecture two hours.

#### TEC 1708-CONSTRUCT TECH & BLD CODES

#### TEC 2029-SOCIETY AND TECHNOLOGY

This course is designed to provide students with an understanding of the symbiotic relationship between technology and society. Examples of these relationships will be taken from historical accounts and from analyses of contemporary societies both in industrialized and non-industrialized countries. Lecture three hours. (WRITING; MULTI-CULTURAL; CROSS-DISCIPLINARY) (CORE: SOCIAL SCIENCES)

#### TEC 2108-INTRO POWER/ENERGY TECH

An introduction to the study of sources, conversion, controlling, transmitting, and using power and energy. Emphasis will be placed on external, internal and electrical power and energy converters. Lecture two hours, laboratory two hours. (WRITING)

#### TEC 2188-TRANSPORTA SYST & DEVICES

A study of the history and development of transportation systems and devices and the impact of transportation technologies on society. The student will explore the function, characteristics and structure of land, air, water and space transportation systems. Lecture two hours, laboratory two hours. (SPEAKING)

#### TEC 2601-ENERGY ISSUES & TECHNOLOGY

This course will explore the various forms of energy and will examine the complete range of energy conversion systems existing in the world today. Students will examine energy resources, their economic and environmental impacts, and technologies used to exploit them. The course consists of three major sections: principles of power and energy, conventional energy resources, and renewable energy resources. Lecture three hours. (CROSS-DISCIPLINARY) (CORE: SOCIAL SCIENCES)

#### TEC 2718-BUILDING MECHANICAL SYSTEMS

This course introduces students to the design and installation of the mechanical systems in buildings - water supply and waste (plumbing); electrical; and heating, ventilation and air conditioning (HVAC). The course combines lectures on the theory, practice, drawing methods, and building codes related to these systems with hands-on procedures.

#### TEC 2758-SURVEY, SOILS & FOUNDATIONS

This course covers construction from initial site investigation through foundations. Key topics include: soils, soil testing, structural foundation design, surveying, site layout, site plans, and foundation construction. Prerequisite: MAT 1025.

#### TEC 3009-INTRO TECH TEACH PROFESSION

An introduction to the career and technology education curriculum, as well as the professional roles and responsibilities of Technology Education and Trade and Industry teachers. Course expectations include lab activities related to career and/or technology education curriculum in North Carolina, interviews with master teachers, and field experiences in regional Career and Technical classrooms at the middle and high school levels. Prerequisite or corequisite: TEC 2029. Prerequisite: ENG 2001 or its equivalent. (WRITING)

#### TEC 3037-SUSTAIN BLDG SYST FIELD STUDY

Travel, tours, and study of areas of interest within the building performance industry. Conferences, buildings for field research, and building performance firms are typical destinations. Attendance and overnight stays are required. Graded on an S/U basis. Prerequisite: TEC 3728 or permission of the instructor.

#### TEC 3038-COMM CONSTRUCTION TECHNOLOGY

This course introduces students to the technical, economic and managerial aspects of the commercial and industrial construction industries. Primary emphasis is on the equipment, materials, and construction processes used in commercial construction. Lecture three hours. Prerequisites: ENG 2001 or its equivalent, MAT 1025, TEC 2708, and TEC 2758. (WRITING)

#### TEC 3039-MATERIALS SCIENCE

An in-depth study of the structure, characteristics, analysis, and application of modern engineering materials, with an emphasis on the processing/structure/properties/performance interrelationship. Topics include atomic structure and bonding, crystal structure and imperfections, solidification, mechanical properties, strengthening mechanisms, failure analysis, phase diagrams, heat treatment, corrosion and degradation, and materials characterization techniques.

#### TEC 3604-SUSTAINABLE TRANSPORTATION

This course will introduce students to emerging technologies and strategies for creating sustainable transportation systems. Specific topics may include: public transportation strategies, bicycle technologies, electric vehicles, energy efficient transportation options, and alternative fuels such as biodiesel, alcohol, natural gas, and hydrogen. The environmental, social, economic, and technological aspects of these options will be explored. Students will complete a significant independent project. Lecture three hours. Prerequisites: TEC 2601 and TEC 3638, or permission of the instructor.

#### TEC 3605-SUSTAINABLE RESOURCE MGMT

This course will introduce students to material efficiency strategies, recycling, composting, and the concept of life cycle design. A range of resource management philosophies, technologies and techniques will be discussed and analyzed. Students will complete a significant independent project. Lecture three hours. Prerequisite: TEC 2029 or permission of the instructor.

#### TEC 3606-SUST WATER & WASTEWATER TECH

This course will introduce students to both traditional and alternative water and wastewater treatment methods and technologies. Students will study how to analyze the water cycle and how to develop water management strategies which are both economically and environmentally sustainable. Topics may include water availability, water quality and purification techniques, water quality assessment, water pumping, efficiency, grey water, composting toilets, "living machines", and water policy. Students will complete a significant independent project. Lecture three hours. Prerequisite: TEC 2029 or permission of the instructor.

#### TEC 3638-FDN OF APPROPRIATE TECHNOLOGY

This course will explore through writing current topics in the appropriate technology field. Assignments will involve writing with feedback. Topics for writing assignments may include technical reports, white papers, system documentation, opinion pieces, summaries, literature reviews, experimental methods, and data analyses. The APA format will be stressed. Lecture three hours. Prerequisites: TEC 2029 and TEC 2601, or permission of the instructor, and ENG 2001 or its equivalent. (WRITING)

#### TEC 3748-BUILDING SCIENCE

This course introduces students to the complex ways in which buildings interact with their environment. Topics may include indoor air quality, building durability, energy efficiency, and client comfort. Students will use building diagnostic equipment to test for house and duct leakage, indoor air quality, humidity, and air flow. The course also emphasizes interpreting and translating these findings into concise summaries as well as comprehensive written reports. Prerequisites: TEC 2708 and TEC 2718, MAT 1020 or higher, or permission of the instructor. (WRITING; CROSS-DISCIPLINARY; NUMERICAL DATA) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.)

#### TEC 3758-ARCHITECT DESIGN STUDIO II

This is an advanced level course exploring the broad field of architectural building design. It investigates form, space, tectonics, and details of buildings. Students have the opportunity to learn a variety of design development techniques, including manual drafting, sketching and rendering, computer software, and physical model building. Required course projects include presentation drawings, construction drawings, renderings, and models. Lecture two hours, studio two hours. Prerequisite: TEC 3728. (COMPUTER)

#### TEC 4607-WIND & HYDRO POWER TECHNOL

This course will introduce students to the basic concepts, tools, techniques and materials needed to design and construct systems that convert wind and hydro resources into electricity. Students will study how to measure these renewable resources and to estimate the power that could be produced from them. They will also have the opportunity to learn how to design and construct complete renewable electricity systems and become familiar with many contemporary products used in renewable electricity systems. The course will include classroom and "hands-on" design, construction and possibly some field trip experiences outside of class. Lecture two hours, laboratory two hours. Prerequisites: TEC 1728, TEC 2029, TEC 2601, TEC 2708, TEC 2718, and TEC 3638 or permission of the instructor. [Dual-listed with TEC 5607.] Dual-listed courses require senior standing.

#### TEC 4608-PHOTOVOLTAIC SYS DSGN CONSTR

This course will introduce students to the basic concepts, tools, techniques and materials needed to design and construct systems that convert solar resources into electricity with photovoltaic (PV) technologies. Students will study how to assess the solar resources available at a particular site and how that information can be used to properly design PV systems. They will also have the opportunity to learn how to design and construct complete code compliant photovoltaic systems and become familiar with contemporary trends and products. The course will include classroom and "hands-on" design, construction and possibly some field trip experiences outside of class. Lecture two hours, laboratory two hours. Prerequisites: TEC 1728, TEC 2029, TEC 2601, TEC 2708, TEC 2718, and TEC 3638 or permission of the instructor. [Dual-listed with TEC 5608.] Dual-listed courses require senior standing.

#### TEC 4618-SUST BUILD DESIGN & CONSTR

This course introduces students to the concepts and best practices related to sustainable building design and construction. Course topics include green building certification programs, sustainable building design software, high performance construction practices, resource efficient material selection, sustainable site planning, water efficiency, indoor air quality, and passive solar design. The course also explores a variety of unconventional building techniques and building materials such as straw bale, adobe, cob, and geodesics. Other topics discussed include sustainable community design, low impact development, composting, recycling, and grey water systems. Prerequisites: TEC 2708 and TEC 2718 or permission of the instructor. [Dual-listed with TEC 5618.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### TEC 4628-SOLAR THERMAL ENERGY TECH

This course will introduce students to the basic concepts, tools, materials and techniques needed to convert solar energy into heat. Specific technologies to be studied include solar cookers, solar dryers, solar water heaters, solar water pasteurization/distillation, solar greenhouses/coldframes, and some house heating systems. Students should develop skills in the use of tools, materials, and processes which effectively and efficiently capture and convert the sun's energy into thermal energy. The course will include traditional classroom and "hands on" design, construction and testing activities. Lecture two hours, laboratory two hours. Prerequisites: TEC 1728, TEC 2029, TEC 2601, TEC 2708, TEC 2718, and TEC 3638 or permission of the instructor. [Dual-listed with TEC 5628.] Duallisted courses require senior standing.

#### TEC 4638-CONTEMP PROB APPROP TECH

This course is designed to provide students with an overview of contemporary problems facing the Appropriate Technology movement such as affordable and efficient alternative energy systems, small scale production systems, waste management and recycling, bioregional development, community and shelter design and technology transfer methodology. Each student will have the opportunity to explore in-depth a problem of their choosing and will be given guidance in the identification, definition and analysis of their chosen problem. Both library research and prototype or model construction will be required. Lecture three hours.

Prerequisite: TEC 4608 or permission of the instructor. (WRITING; SPEAKING) [Dual-listed with TEC 5638.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### TEC 4667-HOUSING & HOME FURN SEM

A seminar structured to prepare managers and leaders for careers in industry with emphasis on home furnishings, construction, and design. A highly interactive, open course with limited enrollment and guest speakers. Two-hour seminar, one day per week. The course includes an all day trip to the High Point furniture market. Graded on an S/U basis.

#### TEC 4700-BIOFUELS TECHNOLOGY

An examination of evolving biofuel technologies such as biodiesel, alcohol, cellulose products, and methane which are being developed to displace depleting fossil fuels (diesel, gasoline, natural gas, and coal). This course will introduce students to the basic concepts, tools, techniques, and materials needed to assess, design, and construct biofuels technology systems. Coursework will include multimedia presentations, lectures, discussions, films, field trips, homework, guest-speakers, and laboratory activities. Topics include: internal combustion engine technology, biodiesel chemistry and physical properties, combined heat-power systems, materials compatibility, by-products, closed-loop designs, energy balance, life cycle assessment, ASTM specifications, fuel analysis, feedstocks, biofuels and agriculture, biofuels in developing countries, ethanol, cellulosic ethanol, biogas and landfill gas, and ecoindustrial models.

Prerequisites: TEC 2601 and TEC 3638, or permission of the instructor. [Dual-listed with TEC 5700.] Dual-listed courses require senior standing.

#### TEC 4711-CMPTR MODEL RENEWABLE EN SYST

This course will introduce students to a variety of software packages for modeling the performance of renewable energy systems, and will help them develop proficiency in their use. Software packages may include Excel, FChart, PVFChart, BLCC, HOMER, WindCAD, RETScreen, and ARCReader. Students will study how to predict the performance of a variety of solar heating technologies, photovoltaics, wind turbines, and solar house designs. The economics and environmental benefits of renewable energy systems will also be explored. File formats and memory allocation schemes, as they relate to understanding data storage, will be discussed.

Effective problem solving skills will be emphasized throughout the course. Prerequisites: TEC 2601 and TEC 3638 or permission of the instructor. (COMPUTER) [Dual-listed with TEC 5711.]

Dual-listed courses require senior standing.

#### TEC 4718-CONSTRUCTION MANAGEMENT

This course introduces students to the mechanics of managing construction projects and personnel. Organizational structures, required licenses, codes, permits, safety requirements, personnel management, customer relations, scheduling, accounting, insurance, and financing are addressed. Special attention is given to the use of computer software, such as spreadsheets and scheduling programs, for construction management activities. Prerequisites: MAT 1025 or higher, TEC 2708, TEC 2718, TEC 3038, TEC 3718, and basic knowledge of computer word processing, Internet procedures, and spreadsheets. (NUMERICAL DATA; COMPUTER) (ND Prerequisite: passing the math placement test or successful completion of MAT 0010.) [Dual-listed with TEC 5718.] Dual-listed courses require senior standing; juniors may enroll with permission of the department.

#### TEC 4738-ARCHITECT DESIGN STUDIO III

This course builds on previous courses in construction technology and architectural design to demonstrate to the student how to integrate the myriad aspects of architecture - from art to environment to materials to spaces to construction - into successful building designs. The course stresses application of design fundamentals to building design, but emphasizes the key elements of buildability, efficiency, durability and indoor air quality. Lecture two hours, laboratory four hours. Prerequisites: TEC 3748 and TEC 3758.

#### TEC 4748-ARCHITECT DSGN STUDIO IV

This course serves as the capstone course for the major in Building Sciences with a concentration in Architectural Technology and Design. The course proceeds through the entire architectural design process during the semester, culminating in the design of a structurally sound, efficient, durable, high performance building that meets all relevant building codes. Lecture two hours, laboratory four hours. Prerequisites: TEC 3038, TEC 3718, TEC 3738, and TEC 4738. Corequisite: TEC 4718.

#### TEC 4778-INTEG BLDG DESIGN & CONSTRUCTION

This is an advanced level course exploring the broad field of how architectural building design, engineering, and construction management interface with one another. It investigates Integrated Project Delivery methods using Computer-aided Drafting and Design (CADD), Building Information Modeling (BIM) and physical model building. Required course projects include a full set of construction drawings, cost estimates, project planning, and scheduling. Lecture two hours, laboratory two hours. Prerequisites: TEC 3718, TEC 3728, TEC 3738. Corequisite: TEC 4758.

#### TEC 4788-INTEGRAT ENERGY & BLDG SYSTEMS

This course is an advanced study of the physical principles behind the interaction of both residential and commercial buildings with the environment, including the performance of heating, cooling, ventilation, and humidity control systems. Traditional, high performance, and emerging technologies and practices are studied in the context of energy efficiency. Load calculations, system specification, and system integration are explored using the latest building information modeling (BIM) software tools. Lecture two hours, laboratory two hours. Prerequisites: TEC 3718, TEC 3728, TEC 3748, TEC 4618.

#### H P 2200-LIFESTYLE DIS RISK REDUC

A review of the major lifestyle diseases (heart disease, cancer, diabetes mellitus, HIV infection, hypertension, etc.) and appropriate screening tests and interventions to reduce risk. Emphasis will be placed on the study and interpretation of the U.S. Preventive Services Task Force guide for clinical preventive services.

#### H P 3130-ENVIRONMENTAL HEALTH



Study of the application of various principles of environmental sciences and ecology as they relate to the prevention and control of disease, over-population, pollution of water, air, land, solid waste and noise. The interdependence of man, the environment, and disease will be stressed.

#### H P 3700-HEALTH BEHAVIOR CHANGE

Focuses on the development, implementation, and improvement of interventions and programs targeted at health behaviors. Research and theoretical issues are discussed on a broad range of behaviors- from diet and exercise patterns to safety behaviors. Diverse theoretical perspectives on health behavior are discussed. The personal, family, social, institutional, and cultural determinants of health behavior are considered.

#### HCM 4930-ETHICS IN HEALTH CARE

#### NUT 1202-BASIC FOOD SCIENCE

Introduction to and emphasis on basic scientific principles of food. Integration of scientific principles into food study from the consumer perspective including identification and conservation of nutrients into a meal management format.

#### NUT 2201-FOODS & NUTRIT CHILDREN

A study of relationships between nutrition and emotional, mental and physical well-being of infants and children. Diet planning, food preparation, food purchasing, storage, sanitation and safety standards in child development programs.

#### NUT 2202-NUTRITION & HEALTH

Application of basic nutrition principles to the prevention of disease and the promotion of health. The wellness perspective is integrated in the course through the following topics: chronic diseases, health risk assessment, decision making, health behavior change, wellness planning and evaluation, and literature evaluation.

#### NUT 2351-GLBL NTRTN EMRGNG HLTH CHLLNGS

This course will examine global nutritional issues as they pertain to health and incidence of disease, integrating social, biological, political, economic, and environmental factors. The relationship of nutrition and global health to diverse aspects of globalization and economic development will be explored. Specific issues include hunger and obesity, infant mortality and elder health, nutritional programs and agencies, local to global food markets, and meat versus plant food sources. Students will gain the ability to accurately evaluate the food and health issues of a specific country or region.

#### NUT 3202-FOOD PURCHASING & PRODUCT MGMT

Managerial aspects of food service systems purchasing activity. Emphasis on steps in the flow of costs: purchasing, receiving, storage, issuing, preparation, portioning, service, and accounting for sales. Particular attention will be given to product identification and specification. Labor costs and the technological applications that assist managers in purchasing are discussed. Active problem solving and computer applications are used to relate the principles learned to the food service industry.

#### NUT 3205-NUTRITION & LIFE CYCLE

The study of nutritional needs and concerns in the various physiological ages of humanity. Application of the principles of nutrition to pregnancy, lactation, infancy, pre-school and school age years, adolescence, adulthood, and later maturity with discussions of nutrition services and programs available.

#### NUT 4000-NUTRITION COUNSELING

Principles of dietary counseling for the general population and for individuals with special health problems. Principles of teaching and learning applied to nutrition counseling of patients with specific health problems.

#### NUT 4200-ADVANCED NUTRITION I

The role of nutrients at the specialized cellular level. Emphasis on intermediary metabolism of carbohydrates, proteins and fats. Scientific planning of adequate dietaries for normal individuals of different economic levels as related to health and efficiency.

#### NUT 4206-ADVANCED NUTRITION II

Function of minerals in human metabolism, homeostatic maintenance, and critical interpretation of nutrition information.

#### NUT 4504-FOODSYST/DIETETICS ADMIN

Budget development and resource allocation, including financial status monitoring, evaluation, and control. The course will also cover quality improvement, human resources, employment processes and procedures, and facility layout, including the composition, role and responsibilities of facility planning teams as well as equipment selection and specification.

#### NUT 4509-QUANTITY FOOD PRODUCTION

Application of food service principles to quantity food service: menu planning, recipe development and standardization, costing, marketing trends, purchasing, production, presentation, and service considerations. Prevention of all types of food contamination; the Hazard Analysis Critical Control Point (HACCP) food safety system is emphasized. Aesthetics of food as related to the food service industry.

#### NUT 4540-DIET AND PUBLIC HEALTH

#### NUT 4560-COMMUNITY NUTRITION

An introduction to nutrition needs of the community and nutrition services provided to the public through various agencies and organizations, techniques for determining nutrition needs, methods of extending services to various groups in the community, and factors affecting acceptance of these services.

#### NUR 4090-TRANSCULTURAL & GLOBAL NURSING

This course compares and contrasts health care delivery systems and nursing education in the United States with those in selected industrial and developing countries' systems.

#### P E 1709-WATER AEROBICS

#### P E 1712-SWIMMING FOR FITNESS

#### P E 1720-HIKING

#### P E 1721-BACKPACK/ORIENTEERING

#### P E 1724-CANOEING

#### P E 1725-INTERMEDIATE CANOEING

#### P E 1727-FLY FISHING

#### P E 1730-ROCK WALL CLIMBING

#### P E 1733-MOUNTAIN BIKING

#### P E 1734-INTERMEDIATE MOUNTAIN BIKING

#### P E 1735-WHITEWATER RAFTING

P E 1742-AEROBICS

P E 1743-INTERMEDIATE AEROBICS

P E 1745-JOGGING/CONDITIONING

P E 1748-TAI CHI

P E 1751-YOGA

P E 1752-INTERMEDIATE YOGA

P E 1754-WEIGHT TRAINING

P E 1755-INTERMEDIATE WEIGHT TRAINING

P E 1759-INDOOR CYCLING

R M 2100-LEISURE IN SOCIETY

This course focuses on relationships between the individual and society in the context of leisure. It examines both the biological and cognitive foundations of individual leisure behavior and the cultural forces that influence personal experience. Emphasis is on how an individual's leisure simultaneously shapes and is shaped by diverse group, organizational and social contexts.

R M 2110-INTRO TO REC & LEISURE

This course consists of an introduction to the concepts of recreation and leisure and a survey of the recreation profession. The course also includes a history of the leisure and recreation movement, and development of a personal philosophy related to discretionary time and related choices.

R M 2130-PRIN COMMERCIAL REC & TOURISM

An introduction to the commercial recreation and tourism industry. Topics covered in this course include: origins of commercial recreation and tourism, the amusement industry, event management, travel and tourism, and allied industries. Students will complete an indepth analysis of one industry within commercial recreation/tourism.

R M 2140-NAT RES: BECOMING INFORM CIT

Through the lens of outdoor recreation, this course will examine natural resources to help shape a more informed citizen. Students will examine dealings with natural resources by looking at how humans value and define ownership of them, as well as look at natural and outdoor recreation resource management practices and why they can be controversial or problematic. In addition, this course will look at how citizens become involved in the politics of natural and outdoor recreation resources.

R M 2210-RECREATION RESOURCE MGMT

This course introduces students to the complexities of natural resource management. Elements of the course at the micro level include landscape and trails management. At the macro level, the focus is on roles of government agencies and non-profit organizations in balancing the supply and demand for outdoor recreation while maintaining environmental quality.

R M 2220-PRIN OUTDOOR EXPER EDUC

Principles of outdoor experiential education is a survey of experiential education as it takes place in outdoor settings. The emphasis is on programs that either take place outside of the classroom, outside the purview of the formal public schools, or those conducted by natural resource agencies as part of their information and education imperatives. Students prepare to design and implement experiential education programs at appropriate outdoor sites for various agencies, organizations, and audiences.

#### R M 3154-OUTDOOR EXPER EDUC LAB

This course focuses on the elements of planning and participating in an outdoor expedition. Trip planning, logistics, menu preparation, permits, equipment, risk management, navigation, expedition behavior and evaluation will be emphasized.

#### R M 3157-ENVIRONMENTAL EDUCATION SKILLS

This course is designed to introduce students to the basic skills needed to facilitate environmental education programs and facilitate outdoor programs in ways that have as little environmental impact as possible. Students will become Leave-No-Trace (LNT) trainers and will begin the certification process for becoming North Carolina Environmental Educators.

#### R M 3210-INCLUSIVE RECREATION

This course consists of a study of and practical application of principles underlying the provision of recreation services to populations limited in their access to normal recreation programs. The course will focus on individual populations and the respective barriers to participation, the process of program planning and resource development that alter these limitations, and the practical experience of application of a particular plan. Attention will also be devoted to a study of successful community and institutional programs.

#### R M 3230-COMMERCIAL RECREATION MNGT

This course examines the private-commercial recreation sector. Key concepts include: economic impact studies; feasibility studies; promotion and marketing strategies for commercial recreation business; and resort management techniques.

#### R M 3241-TRAVEL AND TOURISM

This course provides an in-depth study of tourism and recreational travel. Topics include the origin, present characteristics and various dimensions of travel and tourism; the importance of tourism to local and global economics; social, psychological and environmental implications; and international tour management.

#### R M 3242-TOURISM IN COSTA RICA

This study tour focuses on the recreation and tourism resources and services in Costa Rica. Using a comparative government, economic and recreation/tourism industry approach, the course will expose students to the problems related to recreation resource management and ecotourism/sustainable tourism development. The changing cultural institutions and specific governmental agencies involved in this industry's growth in Costa Rica will be examined. This study tour will also investigate recreation service provisions for native Costa Ricans as students visit and experience a range of recreation offerings themselves.

#### R M 3244-COASTL TOURISM FLD BSD UNDRSTG

This is a field course designed to acquaint students firsthand with the many aspects of the coastal tourism product along the southern coastline of the United States. Students in this class will visit a number of sites and settings that play a role in tourism development and delivery.

#### R M 4140-OUTDOOR LEADERSHIP

This course consists of a dual focus on field leadership of outdoor pursuits and administration of outdoor programs. Topics will include risk management, leadership styles, outdoor leadership competencies, experiential education and current issues central to effective outdoor leadership.

#### R M 4141-OUTDOOR REC POLICY DEVEL

This is a field course in Washington, D.C. designed to acquaint the student with the process of developing outdoor recreation and natural resource policies at the federal level. Congressional offices, federal natural resource management agencies, and non-profit conservation agencies will be visited and analyzed with respect to policy formulation, lobbying and the legislative process.

#### R M 4450-SEM IN TOURISM DEVELOP

This course provides an in-depth analysis of tourism development. The various forms of tourism development that are utilized to meet the needs of tourists and host communities are analyzed through case studies and class discussion. Topics covered in this class include: sustainable development, eco-tourism, community tourism development, and special interest tourism.

#### S W 2010-PROF SOC WK CONTEMP SOC

Provides the student with the opportunity to learn about social work as a major helping profession and social work practice in a changing society. Focus is on characteristics of the helping professions; underserved populations in the U.S.; and the wide variety of settings in which professional social workers practice. Entry level course for social work majors.

#### S W 2020-AMER SOC WELFARE SYSTEM

An introduction to social welfare as a concept and as a social institution: overview of the public and private network of social programs and services intended to help fulfill basic human needs. Analysis of major social issues, problems, and values which shape social policy and the distribution of resources in the U.S., with attention to several other nations.

#### S W 2615-CULTRL COMPETENCE HELPING PROF

This course offers an opportunity for students to examine both personal and professional issues related to practice in the helping professions. Focus is on sensitivity to, understanding of, and appreciation for people from diverse cultural backgrounds. It includes content related to vulnerable, underserved groups in the United States and examines culture and social class within the context of culturally proficient delivery of human services.

#### S W 2630-HUMAN BEHAV & SOC ENVIR

The person-in-environment approach is applied to stages of the life cycle. Review and application of relevant social science and social work theories, concepts, and research is included. This course also provides the student with the opportunity to become skilled at assessing human functioning in varied social contexts and provides the bases for developing strategies for social work intervention.

#### S W 3330-SOC WELF POL, PROG & ISS

Examines policies and issues associated with existing social service delivery systems, and emphasizes policy formulation and assessment of alternative strategies for establishing and meeting social goals. Influence of social work principles, values, and practice on social welfare policies and issues.

#### S W 3850-SOC WORK RESEARCH METHODS I

An introduction to a scientific approach to building knowledge and skills in research and the evaluation of practice. The course will focus on understanding the interconnections between research and social work practice, and the role that social work core values play in research. Ethical conduct as a social work researcher and evaluator will also be covered.

#### S W 3870-SOC WORK RES METHODS II

This course builds on the learning and skills developed in SW 3850: Social Work Research Methods I. In this course, students will collect, analyze and interpret data for social work research. Students will also develop the skills needed to conduct evaluations of practice with individuals, families, groups and communities. Ethical conduct as a social work researcher and evaluator will be reinforced. A one hour data analysis lab is part of this course.

S W 4020-SOC WK PRAC W/ COM & ORG

Applications of social work knowledge and skills to intervention with communities and organizations. This course will teach students to effectively distinguish between micro and macro problems, to assess community and organizational needs and to develop and implement effective macro interventions with neighborhoods, communities, and social agencies. The course provides a conceptual framework for community organization and organizational practice.

S W 4210-SOCIAL WORK AND THE LAW

Students will develop an understanding of the basic legal principles and procedures relevant to social work practice focusing on the impact of the legal system on social work practice. The course will emphasize the development of critical thinking skills necessary for addressing complex legal and ethical dilemmas. Students will develop social work practice knowledge and skills at both the micro and macro levels.

S W 4245-SOC WK PRAC IN HEALTH CARE

S W 4630-PROGRAMS & SERV OLDER ADULTS

This course focuses on both policy and practice issues related to services for older adults. Drawing on research from both sociology and social work, the long-term impact of an aging society on social institutions as well as relevant modes of practice in addressing the needs of the older population are emphasized.

S W 4690-SR SEM: ISS ETH FLD PROF

This seminar integrates academic concepts and theory with the realities of social work practice that students experience in field settings, and explores and synthesizes contemporary professional issues.

MUS 2016-APPALACHIAN MUSIC

A survey of Appalachian music including both instrumental and vocal styles, older traditions and newer regional forms. Students will have opportunities to develop musical skills through hands-on class projects and activities. Lecture three hours. (Same as AS 2016.) (CORE: HUMANITIES)

MUS 2018-INTRO TO WORLD MUSIC

A survey of musics representing international cultures. Emphasis is placed on the role of music in various life experiences. Lecture three hours. (MULTI-CULTURAL) (CORE: HUMANITIES)

MUS 2022-CULTVNG CREATIVE EXP THRGH MUS

Students will create works of music using various media, reflecting on the creative process, the influence of culture, and the dynamic and reciprocal interactions among the artist, instructor, and student. Lecture/studio three hours. (CORE: HUMANITIES)

MUS 2023-MUSIC AND GENDER

An investigation of the social constructions of gender and how they are reflected in music. Topics will include how gender constructions operate in compositional, performance and teaching practices.

MUS 2034-INTRO TO TEACHING MUSIC

Introduction of teaching music in the schools within the contexts of general, band, choral, and orchestral music education. Includes basic strategies for teaching students with disabilities and within a multi-cultural context. Public school music observations are required. Lecture one hour, laboratory one hour. Prerequisites or corequisites: MUS 1002 and MUS 1008.

#### MUS 2050-INTRO TO MUSIC THERAPY

An experiential survey of the field of music therapy and the use of music in the treatment of persons with special needs. Lecture and demonstration two hours.

#### MUS 2051-MUS THERAPY CLINICAL SKILLS

Introduction to clinical skills required of the practicing music therapist, including behavior observation, clinical documentation, and behavior change. Prerequisite: MUS 2050.

#### MUS 2070-MUSIC IN SPECIAL EDUCATION

An introduction to the role of music, music education, and music therapy for students with special needs. Characteristics, strengths, needs, and strategies for children and youth having one or more disabling conditions. Lecture and demonstration two hours.

#### MUS 2071-MUSIC, BRAIN & NEURO DISORDERS

An introduction to neurology and the neuropsychology of music. Experiential and didactic exploration of music therapy assessment and interventions for adults with neurological disorders. Lecture and demonstration two hours. Prerequisites: MUS 2050 with a minimum grade of "B-" (2.7), and MUS 2051 with a minimum grade of "C" (2.0). Music Therapy majors must be enrolled concurrently in MUS 3900.

#### MUS 2615-MUSIC AND PROPAGANDA

This course is designed to examine ways in which music has historically been used internationally to enhance/intensify various aural and visual forms of propaganda. Although specific cases such as those in Nazi Germany, Communist China, and the Soviet Union are explored, the broader scope of the course also addresses the concepts of patriotism, promotion, protest, and manipulation.

#### MUS 2616-CUBAN MUSIC AND CULTURE

This course is designed to explore the music of Cuba as it has both reflected and shaped culture throughout Cuban history from the pre-Columbian era to the early twenty-first century. Of particular interest is the evolution of Cuban music during the twentieth century as it was appropriated and propagandized for economic and political purposes, as well as the development of Cuban music video accessible via the internet.

#### MUS 2900-APPRENTICESHIP INSTR REPAIR

Students will participate as apprentices in the routine operation of a manufacturing or repair facility. Graded on an S/U basis.

#### MUS 3010-SERVICE PLAYING

Laboratory experience in playing services of worship including chant accompaniment, hymn playing, anthem accompaniment and simple improvisation. Advanced topics include figured-bass realization, modulation and open-score reading. Lecture two hours, laboratory one hour. Prerequisite: MUS 1002.

#### MUS 3037-GENERAL MUSIC PEDAGOGY

Detailed study of general music education pedagogy with emphasis on Orff-Schulwerk, Kodaly and Dalcroze methods for elementary general music classes. Lecture and demonstration two hours. Prerequisite: MUS 1037 and piano proficiency. Prerequisite or corequisite: MUS 2034 or permission of area coordinator.

#### MUS 3046-TUNES

A study of popular American dance music "standards" for proper execution of interpretation and performance style. In addition, formal structure will be studied. Alternate years. Lecture and demonstration two hours.

#### MUS 3070-DEVELOPMENTAL MUSIC THERAPY

Theory, research and clinical skills related to music therapy with children and youth having one or more disabling conditions. Lecture and demonstration two hours. Prerequisites: MUS 2050 with a minimum grade of "B-" (2.7), and MUS 2051 and MUS 2070 with a minimum grade of "C" (2.0) in each course. Music Therapy majors must be enrolled concurrently in MUS 3900. (SPEAKING)

#### MUS 3072-MODELS MUS THERAPY MENT HLTH

A study of theoretical and empirical foundations of music therapy in mental health. Major models of counseling and psychotherapy will be surveyed. Lecture and demonstration two hours. Prerequisites: MUS 2050 with a minimum grade of "B-" (2.7), and MUS 2051 with a minimum grade of "C" (2.0). Music Therapy majors must be enrolled concurrently in MUS 3900.

#### MUS 3073-MUS THERAPY PRAC MENTAL HEALTH

Experiential and didactic exploration of music therapy assessment and interventions for persons with mental disorders. Includes a systematic review of research-supported, music-based treatments for the most prevalent disorders. Lecture and demonstration two hours.

Prerequisites: MUS 3072 with a minimum grade of "C" (2.0), and PSY 2212 or permission of the instructor. Music Therapy majors must be enrolled concurrently in MUS 3900.

#### MUS 3420-MUS ENTERTAINMENT INDUST

A core course for Music Industry Studies majors providing in-depth exploration of the music and entertainment industry. Course content will include publication, copyrighting, contract writing, production, broadcastng, management promotion and the legal environment within the arts.

The course will include a detailed research paper and a music industry simulation project requiring two oral presentations. The course will also include guest lecturers from the industry and field trips. Lecture three hours. Prerequisite: MUS 1420. (WRITING; SPEAKING)

#### MUS 3421-MUSIC MARKETING

Practical experience in the promotion of a local artist. Content includes: designing a marketing strategy for the Internet and print media, developing a marketing campaign including press releases, and obtaining radio airplay. Lecture one hour, laboratory two hours. Prerequisite: MUS 2445.

#### MUS 3422-MUSIC MANAGEMENT

Practical experience managing a local artist. Content includes development of an identity statement, short-term and long-term goals, and a business plan. Lecture one hour, laboratory two hours. Prerequisite: MUS 2420. (CROSS-DISCIPLINARY)

#### MUS 3900-MUSIC THERAPY PRACTICUM

Supervised clinical experience in music therapy. Open only to Music Therapy majors.

Prerequisites: MUS 2050 with a minimum grade of "B-" (2.7) and MUS 2051 with a minimum grade of "C" (2.0). May be repeated for credit. (WRITING)

#### MUS 3901-CHURCH MUSIC FIELD WORK

The student will be responsible for all or part of an established, professional music program in an organized church, subject to the approval of the professor. The professor and the supervising musician or pastor of the church will evaluate the student's work. Private or group conferences will be held with the professor, who will give guidance to the student. Prerequisite: MUS 3020. Graded on an S/U basis.

#### MUS 3902-MUSIC TEACHING PRACTICUM

Supervised field experience in general music education. Prerequisite: MUS 3037.

#### MUS 3903-MUSIC EDUCATION PRACTICUM



Supervised field experience in instrumental or choral music education. Open only to Music Education majors. Prerequisites: successful completion of choral or instrumental music education proficiency requirements.

#### MUS 4004-ORG & PHIL CHURCH MUS

Organizational principles of a comprehensive church music program, including a study of the philosophy of the art form of music as it relates to theological concepts. Lecture two hours.

#### MUS 4035-DIR ST AREA PEDAG & LIT

A survey of current philosophies, materials, techniques, and literature in the student's area of specialization and their application to teaching situations. Lecture two or three hours.

Prerequisite: junior or senior standing or consent of the instructor. This course is required of sacred music majors and instrumental or vocal performance majors.

#### MUS 4050-PSYCHOLOGY OF MUSIC

Introduction to psychoacoustics; exploration of human affective, aesthetic, and physiological response to music; and introduction to research in music. Lecture and demonstration three hours.

#### MUS 4071-MUSIC THERAPY IN HEALTH CARE

Theory, research and clinical skills related to music therapy in medical settings and in palliative care. Exploration of new applications and specialized techniques. Lecture and demonstration two hours. Prerequisite: 2 s.h. of MUS 3900 with a minimum grade of "C" (2.0). Corequisite: Music Therapy majors must be enrolled concurrently in MUS 3900 or MUS 4800.

#### MUS 4900-INTERN IN MUSIC IND STUDIES

The internship will be completed under the sponsorship of a music business that focuses on one of the following: music products, music recording, or music management and promotion. The prospective intern and the internship director will select the internship site. The intern will be in weekly contact with the director during the internship. Graded on an S/U basis.

#### MUS 4901-INTERNSHIP IN MUSIC THERAPY

A minimum of 1020 hours of supervised clinical experience in music therapy at an approved clinical training site. Prerequisites: completion of all other course requirements for the Bachelor of Music degree in Music Therapy. MUS 1037, MUS 1053, MUS 3060, MUS 3061, MUS 3070, MUS 3073, MUS 3900 (5 s.h.), MUS 4060, MUS 4061, MUS 4070, MUS 4071, and MUS 4800 must be completed with a minimum grade of "C" (2.0) in each. Graded on an S/U basis.

#### CONFLICT AND PEACE

In the 20th century, over 170 million men, women, and children died globally in recognized genocides as compared to approximately 36 million battle-dead. This course provides the historical and theoretical background necessary to formulate well-grounded opinions on the matter and inevitability of genocide. Using a strong multidisciplinary perspective, we explore relevant and fundamental concepts to genocide. Then we will compare the cultural, historical, and economic roots of a group of genocides that have occurred around the world. From our evaluations we will analyze the relevant issues from multiple perspectives. We will consider genocides' aftermath and how the world responds to the victims and perpetrators. Finally, we will discuss the risk of genocides today and in the future and look at what responsibilities we as global citizens can do to avoid further genocide and foster a culture of tolerance and social responsibility. The course is discussion based.

#### STEAMPUNK CIVILIZATIONS

This course will engage students in several areas. Steampunk is an international phenomenon that has spawned not only fiction and film, but fashion and home decorating trends. Lively international online communities participate in a global debate about the role of technology in our past and our future as a species. We will explore the role of historical imagination in the late nineteenth and early twentieth centuries, the impact of technology on history and culture, and how those have been translated into films, novels, websites, and subcultures. We will examine the industrial revolution, political theory and economy. Then we will look at large technological shifts occurring in our lifetimes. We will focus on two novels, *Leviathan* by Scott Westerfeld and *The Eyre Affair* by Jasper Fforde. We will watch and analyze several steampunk films across several genres including clockpunk, cowpunk, deiselpunk, and anime. All of these will allow us to examine gender relations power relations, government, invention, and the role of technology in shaping the past, how we imagine the past, and how we envision the future. Each week will have a short assigned writing theme to allow the students to reflect on the ideas they've covered and to practice their writing skills. Special attention will be given to steampunk's role in international fandoms.

COFFEE,CULTURE,& COMMUNICATION

#### CLIMATE CHANGE

Climate change is still a controversial topic, not only among scientists but also among the general public. The outcome of this debate is important to us as a global society because of the policy choices and ultimately the laws that will be passed. The policy choices made in different countries will be important to the local communities and to the global society because the effects of climate change are both local and global. We will be learning about the science behind climate change, and the uncertainties and challenges faced by the scientists and policy makers. We will also learn about how decisions and policies affect climate change issues and the different stakeholders affected by these issues.

Basic scientific concepts of climate change will be explained throughout the course and will be enhanced by discussing various academic articles and case studies.

The course will also concentrate on team and leadership building skills, effective communication, and critical thinking skills through these scholarly articles and case study discussions. This will help students recognize, among other things, human versus natural causes and impacts of global warming on the environment, diagnose a problem, and come up with solutions to that problem through analysis and reasoning.

#### FIGURES OF SERVICE AND JUSTICE

This course will invite students to consider the life, work, and philosophy of great figures of justice and service. Students will examine lives of writers such as Nelson Mandela, Jane Addams, Mohandas Gandhi, Aung San Suu Kyi, Martin Luther King, Oscar Romero and others. Additionally, students will explore service-learning and compare their own outcomes with the great examples. Students will participate in community based service-learning to explore the themes of justice, equality, and social relationships. The course will improve the student's ability to analyze, evaluate, and synthesize complex ideas in the context of current community issues.

#### CLIMATE CHANGE

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#### CONSCIOUSNESS

What is consciousness? Do our thoughts, assumptions, culture and beliefs influence our reality? Am I just a bundle of neurons or is there something more to the essence of who I am? Is attention span something I can improve with practice? How do I construct self, meaning, and purpose? Can mindfulness change our brains, improve our well-being and create a better world?

This course explores the mysteries of consciousness by examining this phenomena from multiple, interdisciplinary perspectives on self, psychology, anthropology, and philosophy. Course activities focus on student engagement through research, discussions, and papers. Students will engage in contemplative inquiry based in reflective journals and mindfulness practices that explore attention, self-awareness, and inner knowing. An examination of attitudes, habits, beliefs, and assumptions that influence our worldview combined with readings and research on the subject of human consciousness will culminate in the student's articulation of an integrative philosophy of mind. (This course meets the GLO Attribution)

#### GLOBAL UNDERSTANDINGS

This course will be linked with three universities located in the People's Republic of China, Taiwan, and Thailand. The course will provide students with multiple perspectives on these cultures and with the opportunity to experience direct interaction with their peers at sister institutions. This comparative study and engagement will allow students to move from an undifferentiated concept of the other to a sophisticated understanding of the many, many others who are different from them.

The course is divided into three five-week modules, with each centering on a different country. Within those modules, ASU students will engage with students in other countries on topics that fall into four broadly-defined areas: college life and education, family life and cultural traditions, stereotypes and prejudices, and religion and the meaning of life. The course is designed so that topics become progressively more challenging inter-culturally as students gain familiarity with each other and with the PRC, ROC, Thailand, and the U.S.

Our readings and course materials will be drawn from carefully selected readings in the umbrella field of communication across the cultural divide, and from our own fields of study. The pedagogical practices and assignments for the course will place an emphasis on engagement with ideas and people, individual and group reflection and opportunities for creative synthesis.

#### HUMAN IMPACTS ON ENVIRONMENTS

This course aims to teach the students about how decisions/policy affects the environment and the different stakeholders. The concept of a sustainable environment is both local and global in its applicability. Coming to an agreement on how much people want their environment to be sustainable is a difficult issue because of the differences in what people want from their environment. The issues that lead to such disagreements are at once global and local to that particular issue. This course aims to teach the students about how decisions and policies affect environmental issues and the different stakeholders involved with these issues.

#### GLOBAL UNDERSTANDINGS

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Our readings and course materials will be drawn from carefully selected readings in the umbrella field of communication across the cultural divide, and from our own fields of study. The pedagogical practices and assignments for the course will place an emphasis on engagement with ideas and people, individual and group reflection and opportunities for creative synthesis.

#### ART, RELIGION, AND SOCIETY

This course will explore the role of art and the artist in our world. From ancient times to the present day, humans have used a visual language to communicate their ideas. Long before alphabets were systematized, humans communicated their thoughts through abstract and realistic portrayals of animals, people, and the world around them. Issues as banal as the next meal to cosmic ideologies concerning the nature of God were and continue to be expressed through the visual language of art.

Throughout this semester we will evaluate how and why art has impacted society. We will discuss the relationship between art, religion and society to see how this multivalent visual language is used, exploited, even censored, but never ignored. Using a topical rather than chronological approach, we seek to understand the meaning of this language for our own lives and society so that we may interpret and use this language more effectively.

#### ART, POLITICS, AND POWER

Would you kill for art? Would you die for it? Many have in the past, and one day you might, too! This course will look at the power of art and why people and nations have paid for, stolen, enshrined, collected, or destroyed it. What can we learn from art and how do we protect it? From the Persian sack of Athens in 480BC to the so-called "rape of Europa" in which Hitler stole the greatest artworks in Europe during WWII, we will discuss the desire to steal and destroy another culture's art for political gain. (Did you know that over \$100 Million dollars worth of art was destroyed on 9/11?) We will also discuss the role of art and the artist in conveying the ethos of a culture and introduce the concept of "culture care." Various readings, film screenings, field trips to the Turchin Center on campus, sculpture walks and collaborative assignments will enliven our class discussions. The culminating project will be a short documentary film in which you will create an artifact for our own "virtual museum" to preserve what art YOU think is important.

#### ACTIVISM 101

We all have some issue that we would like to fight for- whether it's advocating for the helpless, improving the environment, or creating better opportunities. No matter what your intended major and career is, there are ways that you can impact the world for the better. During this course you will

- Discuss local social issues, then research and compare our local responses to those in other states and countries
- Explore various methods of activism ranging from simple volunteering to policy advocacy and philanthropy
- Research the history of an activist within your intended major/career
- Learn about opportunities to be involved as an activist from local to global levels
- Design and implement your own activism project, applying the concepts learned in this course.

#### EATING OUR WAY TO HEALTH?

This course will explore nutritional research, myths and dietary information from the USA and around the world. Students will analyze and evaluate various nutritional research, plans and guidelines. The students will then select, modify and/or develop a nutritional plan, which they will follow for 8 weeks. They will ethnographically document their experiences including: food and liquid intake; emotional, physical and cognitive wellness; successes and challenges in complying with their nutritional plan; recommended nutritional plan modifications. Other learning experiences include: tracking three selected foods from origin to their plate and comparing selected nutritional topics with other states and nations establishing strong relationships and consequences between local and more globally diverse choices; and two student selected case study topics which will require a thorough analysis of a topic from multiple perspectives. All course work and learning activities will be saved to an E-Portfolio.

#### CONTEMPORARY GREEN LIVING

Sustainability has become a watchword of contemporary life. Often missing from discussions about sustainability is recognition that the choices we make about the technologies that we use play a major role in achieving the goal of sustainability. In this course, students will learn to distinguish feasible solutions that address the three pillars of sustainability (environment, equity, economy) from those that are merely "greenwashing".

Students will explore the diverse realms of human technological activity, which includes energy, transportation, manufacturing, buildings, food production, and more. Course activities will include, but not be limited to, field trips to view and participate in local community-based sustainable technology projects such as the Collaborative Biodiesel Project, and participation in service learning activities such as "Recycle at the Rock," Habitat for Humanity green building projects, Kraut Creek river clean-ups, K-12 sustainability education, and more.

#### ENERGY TRANSITIONS IN THE U.S.

The current state of energy use in the United States might best be understood by examining the transitions in energy that have occurred over the past 200 years. The harnessing of energy resources and societal development go hand-in-hand. The rise to prominence of different energy resources (including coal, oil, natural gas, nuclear, and renewables) both mirrors and fundamentally affects environmental, social, political, and economic ideals and circumstances of a nation. Through the use of historical and current examples, this course will help students better understand why and how energy transitions have occurred in the US. This examination will also serve to highlight the many factors involved in global energy shifts, with a special focus on the energy issues currently facing recently developed and developing nations. With growing pressures on energy production as a result of rising populations, increasing industrialization, and the threat of global climate change, emphasis will be placed not solely on historical transitions, but also the diverse blueprints and forecasts for our global energy future.

#### HUMAN IMPACTS ON ENVIRONMENT

This course aims to teach the students about how decisions/policy affects the environment and the different stakeholders. The concept of a sustainable environment is both local and global in its applicability. Coming to an agreement on how much people want their environment to be sustainable is a difficult issue because of the differences in what people want from their environment. The issues that lead to such disagreements are at once global and local to that particular issue. This course aims to teach the students about how decisions and policies affect environmental issues and the different stakeholders involved with these issues.

#### ART, POLITICS, AND POWER

Would you kill for art? Would you die for it? Many have in the past, and one day you might, too! This course will look at the power of art and why people and nations have paid for, stolen, enshrined, collected, or destroyed it. What can we learn from art and how do we protect it? From the Persian sack of Athens in 480BC to the so-called "rape of Europa" in which Hitler stole the greatest artworks in Europe during WWII, we will discuss the desire to steal and destroy another culture's art for political gain. (Did you know that over \$100 Million dollars worth of art was destroyed on 9/11?) We will also discuss the role of art and the artist in conveying the ethos of a culture and introduce the concept of "culture care." Various readings, film screenings, field trips to the Turchin Center on campus, sculpture walks and collaborative assignments will enliven our class discussions. The culminating project will be a short documentary film in which you will create an artifact for our own "virtual museum" to preserve what art YOU think is important.

#### A S 5000-BIBLIOGRAPHY & RESEARCH

Instruction and study in bibliographical problems and types of source materials available in Appalachian topics; methods used in locating and evaluating the sources and in reporting of research. Required in the first semester of beginning graduate students.

#### A S 5015-OLD TIME MUSIC TRADITIONS

Alternate years. A multi-cultural study of old time music and its roots, with interdisciplinary approaches from the humanities and social sciences.

#### A S 5020-COL: APPALACH STUDIES

A team-taught interdisciplinary colloquium which will examine contemporary regional, state, and national issues that affect the Appalachian region. The course is designed to help students understand the Appalachian region from a multidisciplinary perspective. The course should be taken by the student during the last semester of residence in the program.

#### A S 5030-BLUEGRASS TRADITIONS

The genesis of bluegrass music from its beginnings to its major redefinition in the mid-1970s.

#### A S 5110-ETHNOGRAPHIC FIELD STUDY

Course involves immersion in a field setting either in the U.S. or through study abroad. Topics, approach, and field sites will be indicated on course syllabi and semester schedules.

#### ANT 5120-APPAL CULT & SOC ORG

Exploration of dominant cultural principles and values and their relationship to historical, economic, and political themes, and to social organization and social dynamics; analysis of the socio-economic structure of Appalachian communities, and of the meaning of kinship and its relationship to community organization and processes.

#### ANT 5200-SUST DEV: THEORY, METHOD

A seminar on the social theory and applied methods of project interventions in communities and regions. A survey of relevant economic and ecological theory and assistance in developing a comprehensive research proposal.

#### ANT 5565-AGRARIAN STUDIES & RURAL DEV

Theoretical and descriptive analysis of peasants, small farmers and corporate agribusinesses through political economic and cultural perspectives in the context of globalization. Explores agrarian social movements and prospects for more just and sustainable outcomes from a comparative perspective. A research paper reflecting theory, method and case development is required.

#### BIO 5202-ORGANISMAL ECOLOGY

The study of the relationships among individual organisms and the biotic and abiotic environments. Structure/function relationships will be emphasized throughout the course. Topics to be covered include: energy budgets; gas exchange by plants and animals; resource acquisition; water relations; and morphological, physiological and behavioral adaptations to environmental selection pressures. Lab will cover techniques of measuring gas exchange in both animals and plants; nutrient uptake; water relations; foraging efficiencies and physiological optima; and techniques in microclimate measurement. Prerequisites: BIO 3302 (Ecology) and either BIO 3301 (Animal Physiology) or BIO 5555.

#### BIO 5212-POPULATION ECOLOGY

This course will employ genetic and ecological principles to explore the population dynamics of plants and animals. The role of populations in evolutionary and ecological processes will be emphasized. Topics will include conservation and loss of genetic variation in natural populations; growth and regulation of populations; and factors affecting their demography, distribution and abundance. Labs will include models of growth and regulation along with techniques for analysis of populations in the field. Prerequisites: BIO 3302 (Ecology) and BIO 3306 (Genetics).

#### BIO 5222-COMMUN & ECOSYSTEM ECOL

A holistic consideration of the interactions among populations of different species with their biotic and abiotic environments. Topics to be covered include succession; patterns in species diversity; community productivity; biogeochemical cycling; ecosystem structure and function. Labs will involve studies of net primary production, nutrient cycling, succession, and diversity, and will include both laboratory and field work. Prerequisite: BIO 3302.

#### BIO 5250-CURRENT TOP ECO & EVOL BIO

This seminar is designed to encourage students to develop more deeply into the ecological and evolutionary literature, with a focus on "hot" issues (e.g. the application of chaos theory to ecology, controversies over global warming, etc.). The students will be required to interpret the results of relevant papers, and to present those findings to other students and faculty. Students will be asked to do one or two presentations per semester, to critique the other students and to engage in discussion of all the papers read.

#### BIO 5502-FRESHWATER ECOLOGY

A study of the abiotic and biotic factors that influence the distribution and abundance of species in freshwater communities. Laboratory exercises include field trips to local streams and lakes.

#### BIO 5503-BASIC & APPL MICROBIOL

Lecture, laboratory and field trips dealing with the underlying principles and applications of techniques used in ecological, industrial and medical microbiology. Lecture two hours, laboratory work to be arranged by the instructor.

#### BIO 5504-TAXONOMY VASC PLANTS

A study of the gross structure, reproduction, and development of the spermatophytes. Special emphasis is placed upon the classification and nomenclature of the spermatophytes. Lecture two hours, field work two hours.

#### BIO 5505-NATURE STUDY

Study of common plants and animals with emphasis on ecology, collecting techniques and identification.

#### BIO 5506-ADV ANIMAL PHYSIOLOGY

A comprehensive study of the physiology of the nervous, muscular, circulatory, respiratory, digestive, excretory and endocrine systems with an emphasis on system coordination and integration.

#### BIO 5507-COMPAR INVERTEBRATE PHYSIOL



This course provides a comprehensive study of physiological processes in invertebrate animals, with emphasis on adaptations to differing life history strategies. The principal goal of the course is to contribute significantly to the student's understanding of basic biological theory. Some prior knowledge of cellular physiology, classification, and morphology of invertebrates will be assumed.

#### BIO 5508-BIOGEOGRAPHY

The biological, climatological, geographic, and geological factors which affect the distribution of animal and plants. Patterns of distribution will be studied in relation to various sizes of geographical units.

#### BIO 5512-LOCAL FLORA

A study of the common flora and economic plants of North Carolina including collection, identification, and methods of preservation.

#### BIO 5514-PLANT ANAT & MORPHOLOGY

A general survey of the external and internal structure of plants; detailed study of anatomy and morphology of representative plants from all the divisions.

#### BIO 5520-CELLS, ORGANISMS & EVOLU

Various topics in cell and developmental biology are explored as they relate to evolutionary biology. In addition to a lecture format, this course is based on group discussions, oral presentations and **written reports**.

#### BIO 5551-ORNITHOLOGY

The morphology, physiology, behavior, ecology and identification of birds. Early morning field trips are required.

#### BIO 5552-ENTOMOLOGY

A comparative survey of the insects and related arthropods with an emphasis on morphology and systematics. Methods of collection and preservation are covered

#### BIO 5555-PLANT PHYSIOLOGY

A study of the basic principles of plant physiology and fundamental processes such as cell properties, water relations, growth, photosynthesis, respiration, and mineral nutrition.

#### BIO 5556-MYCOLOGY

An investigation of the fungi with particular reference to the techniques of working with these organisms.

#### BIO 5557-ICHTHYOLOGY

Ecology, distribution, taxonomy and economic importance of fishes. Freshwater fishes will be emphasized.

#### BIO 5558-TAXONOMY OF FLESHY FUNGI

An in-depth study of the fleshy fungi [mushrooms (agarics), chanterelles, hydnums, polypores, and corals] with an emphasis on morphology, systematics, and ecology. Methods of collection, macroscopic and microscopic dissection, identification, and preservation are covered.

#### BIO 5559-MAMMALOLOGY

The natural history, distribution, adaptations, taxonomy and economic importance of mammals. Field trips and visits to zoos will be arranged.

#### BIO 5560-HERPETOLOGY

The morphology, taxonomy, physiology, and distribution of amphibians and reptiles. Methods of collecting and preserving specimens as well as behavioral aspects of species in their natural habitats will be covered.

#### BIO 5563-BIOLOGY OF AGING

General study of biological/physiological changes over time in the structure and function of the systems of organisms with emphasis on the human body.

#### BIO 5564-MICROSCOPY

A study of the principles and techniques of biological microscopy. Lectures include discussions on preparative techniques for various types of bioimaging, the optical theories behind the imaging technologies, and the structure and function of cellular organelles. Laboratories examine practical techniques of tissue preparation for various kinds of microscopy, the effective use of various types of microscopes, and the interpretation of data obtained from various imaging systems.

#### BIO 5567-LICHENOLOGY

A study of the morphology, diversity, evolution, ecology, physiology, and chemistry of lichens as well as their significance as biological indicators.

#### BIO 5569-INVERTEBRATE ZOOLOGY

Students will be introduced to the 34 extant major and minor invertebrate phyla which make up 99% of the Earth's named animal species and virtually 100% of those animals yet undiscovered. The intriguing natural history, symmetry and development, mode of locomotion, nutrition, reproduction, and primary environments of the invertebrates will be discussed. Labs will emphasize invertebrate habitats, field collection, phylogenetic relationships as well as ecological and physiological adaptations and examination of major morphological characteristics.

#### BIO 5570-PARASITOLOGY

A survey of protozoan, helminthic and arthropod parasites with emphasis on organisms of medical and veterinary importance.

#### BIO 5571-PLANT-INSECT INTER TERR ECOS

A study of the associations between insects and plants, using lecture, class discussions and laboratory exercises. Lecture topics include constraints imposed by plants on herbivorous insects and the strategies insects use to overcome them, pollination biology and ecology and the interplay between biotic and abiotic factors in determining interactions. Students are expected to lead class discussions of current literature. Laboratory exercises are field-based mini-experiments leading to the development of an individual project with experimentation and paper presentation.

#### BIO 5601-ANIMAL BEHAV - ETHOLOGY

Basic principles of animal behavior are approached from an evolutionary perspective. Topics such as instinct, learning, biological clocks, sociobiology, communication and physiological mechanisms of behavior are stressed. Laboratory emphasizes techniques of observing, recording, and analyzing behavior using a research project format.

#### G S 5510-ENVIRONMENTAL PROBLEMS

A study of environmental problems: their historical and cultural origins, their scientific background, and their possible solutions.

#### CHE 5070-ADVANCED PHYSICAL CHEM

Rigorous treatment of the laws of thermodynamics and statistical mechanics. Applications to gases, solutions and other condensed phases, studies of surface effects.

#### CHE 5580-BIOCHEMISTRY I

This course covers the properties of amino acids, proteins, carbohydrates, lipids and nucleic acids and presents a brief introduction to enzymology. Major emphasis is on the chemistry of biological compounds. An introduction to intermediary metabolism is also presented.

#### CHE 5581-BIOCHEMISTRY I LAB

Experimental investigations which supplement the study of the topics in biochemistry.

#### CHE 5582-BIOCHEMISTRY II

This course will cover the intermediary metabolism of amino acids, nucleic acids, carbohydrates and lipids. Metabolic pathways and their associated enzymes are emphasized.

#### ENG 5400-APPALACHIAN WRITING PROJECT

An intensive summer institute for kindergarten through college teachers interested in the teaching of writing. Explores composition theory with an emphasis on the connections among theory, practice, and pedagogy. Teachers will develop curriculum, collect resources, and re-connect as fully functioning writers.

ENG 5570-STUDIES IN AMER INDIAN LIT

Advanced study of major American Indian writers from oral traditions through the present.

ENG 5585-STUDIES IN ETHNIC AMER LIT

An advanced in-depth and multi-cultural examination of major ethnic American writers.

ENG 5640-CULTURAL STUDIES

A study of literature as a cultural practice and of related cultural practices from the perspective of literature

ENG 5650-GENDER STUDIES

A critical study of the significance of gender in literature and other art forms.

ENG 5710-ADVANCED FOLKLORE

An in-depth and multi-cultural study of one or more folklore genres in cultural context with interdisciplinary approaches from the humanities and social sciences.

ENG 5720-APPALACHIAN LITERATURE

A study of major regional movements, genres, writers in the Appalachian mountains, from settlement to the present.

FRE 5000-RSRCH & CRITICAL THEORY

Overview of source materials and advanced research methodologies in foreign languages. Study of the various critical movements and disciplinary approaches to language and literature.

Practical application of methods for uncovering, evaluating, organizing, and reporting of source material.

FRE 5001-FRANCOPHONE CHLDRN ADOL LIT

This course will investigate the history and development of children's and adolescent literature in France and in the francophone world. Study of roles and perceptions of the child and adolescent as these appear in fictional and (auto)biographical writings, and various mass media.

FRE 5002-MSTRPCS FRANCOPHONE ART/LIT

A study of French and Francophone plastic, performance, and verbal art from various historical periods and geographic origins. The course offers a pluridisciplinary exploration of relationships between artistic works and the cultures that produce them.

FRE 5003-FRENCH WOMEN WRITERS

An examination of French women writers and their works from the Middle Ages to the present.

The survey will consider examples of many genres women have created, used, or adapted.

Primary sources chosen for important themes will be complemented by historical and critical readings.

FRE 5004-THE FRENCH MEDIA

The course explores the historical evolution, vehicles of diffusion, purposes, and importance of French media from traditional print to innovative hypertext, and from rudimentary radio to digital broadcasting of the "information age." Coursework includes theoretical readings that complement a "hands-on" investigation and manipulation of these various media.

FRE 5021-POETRY OF FRE EXPRESSION

Comprehensive overview of poetic form, function, and analysis as these pertain to the French-speaking world and French and Francophone literary history. Commented readings of representative poetic texts as products of culture and as tools for language learning.

FRE 5023-THEATER & PERFORM IN FRENCH

Study of a variety of aspects pertaining to theatricality and theatrical genres from traditional venues to pop culture icons. Primary texts will be complemented by theoretical works, film adaptations, and other media presentations.

FRE 5025-FRENCH CULTURAL STUDIES

A study of various artifacts, historic events, and cultural practices and theories that have shaped the private and public spheres of social and institutional development in France.

FRE 5026-FRANCOPHONE CULTURES

This course consists of an in-depth study of selected literary texts and other cultural artifacts (such as films, newspapers, magazines) that underline the traditional and contemporary aspects of Francophone culture. Laboratory work will be mandatory.

SNH 5001-HISPANIC CHLDREN & ADOL LIT

Critical readings of literary works in different genres written for children and adolescents. Study of the evolution and theory of children's and adolescent literature in Latin America and Spain. Special focus on the cultural background, cross-cultural ties, and pedagogy of children's and adolescent literature.

SNH 5002-MSTRPCS OF HISPANIC ART/LIT

Study of seminal works in Spanish and Latin American art and literature, and their literary and cultural impact. Cross-disciplinary approach, taking into account the social, cultural, political, and historical context and impact of texts and objects. Barring duplication of content, the course may be repeated once.

SNH 5003-HISPANIC SHORT FICTION

A study of the short story in Hispanic literature, which will examine the genre from a cultural and literary perspective. Readings and commentary of selected short stories, especially by women and ethnic authors, will trace the history of the genre and explore its main themes. Primary sources will be complemented by literary historical and critical readings.

SNH 5023-POETRY IN SPAIN & LAT AM

A study of Hispanic poetry, which will examine the formal and thematic characteristics of the genre through some of the most meaningful texts by Spanish and Latin American poets. The course includes readings and commentaries of poems as vehicles of cultural diversity and self-expression. Special focus is on the pedagogical potential of poetry in the second language learning process.

SNH 5024-THEATER & PERFORM HISP WORLD

The course offers an examination of Latin American and Spanish plays and performances from an interdisciplinary perspective, and within the context of Hispanic culture and history. Students will study Hispanic plays and performances as texts, spectacles, and learning tools.

SNH 5026-HISPANIC CULTURAL STUDIES

Reading and analysis of articles, books, comics, movies and songs which enable understanding of historical and current cultural issues. The course offers a critical analysis of common definitions and concepts of Hispanic culture, and will provide the opportunity to gain new perspectives relative to literary and cultural artifacts.

SNH 5027-THE MEDIA LAT AM & SPAIN

Study of newspapers, magazines, music, TV programs, and films as products and producers of culture in Spain and Latin America. The course will provide students with the opportunity to acquaint themselves with theoretical approaches to media, and will allow them to develop practical applications of various media in the instructional process.

GHY 5100-SEM IN PHYSICAL GEOGRAPHY

An exploration of special problems related to physical geography with emphasis placed on their impact on the human environment. Barring duplication of content, a student may repeat this course for credit.

#### GHY 5110-SEM IN SPATIAL ANALYSIS

An exploration of unique problems related to one component of spatial analysis: cartography, remote sensing, quantitative/qualitative research methods, geographic information systems, or regional analysis.

#### GHY 5150-SEMINAR IN GISCIENCE

This course provides a fundamental understanding of the research field of geographic information science (GIScience) through reading and discussing current and seminal articles and book chapters. Topics include the theoretical foundations for GIScience, the impacts of geospatial technology on society, and methodological and application issues.

#### GHY 5301-REGIONAL GEOGRAPHY

An in-depth examination of the world from a regional perspective with special attention given to conceptual topics such as world population growth, economic development and environmental problems.

#### GHY 5400-PLANNING THEORY & PROCESS

Foundations of community and regional planning, including linkages with planning theory and growth management, comprehensive planning steps, and how practicing planners use various planning aspects and applications to address contemporary urban and regional issues.

#### GHY 5620-SYNOPTIC & REG CLIMATOLOGY

This course focuses on atmospheric controls and processes at the synoptic scale. Basic meteorological elements and concepts such as jet streams, long-range forecasting, cyclogenesis, and vorticity are discussed. Local and regional climatic patterns and anomalies are examined with respect to the dynamics of the large-scale circulation features of the atmosphere.

#### GHY 5800-ADV QUANTIT & QUALIT METHODS

This course will examine quantitative and qualitative procedures commonly used in the analysis of geographic and planning research problems, including research in both human and physical geography. The course focus will be on applications of quantitative and qualitative procedures in research, but conceptual and theoretical aspects of all procedures will also be discussed. Students will apply quantitative and/or qualitative methods to a geographic topic and will report on the results in a professional quality paper.

#### GHY 5810-DIGITAL IMAGE PROCESSING

Course focuses on acquisition of digital images, image processing, image enhancement techniques for interpretation, and applications of remote sensing technology.

#### GHY 5812-ADVANCED GIS

GIS is a wide ranging topic encompassing five distinct functions within a total system context. These functions are: 1) data input, 2) data storage, 3) data management, 4) data manipulation and analysis, and 5) data output. Emphasis will be placed on the applications frequently found in geography and planning. This course is project oriented to give the student maximum experience in each of the functions of a GIS and to allow the student to associate the technical areas of GIS with "real world" scenarios.

#### GHY 5814-PRINC OF GEOCOMPUTATION

GeoComputation is spatial analysis with or without a geographic information system (GIS). The increasing power of computational environments enables the creation of new methods for analyzing geographic data. This course will include: an introduction to GeoComputational theory, GIS programming, and applications of GIS and environmental models. Lecture two hours, laboratory two hours. Prerequisite: GHY 3812 (Introduction to GIS) or permission of the instructor.

#### GHY 5820-GEOGRAPHICAL HYDROLOGY

Study of the occurrence and movement of water on the earth, with a focus on applications of surface hydrology. Water movement through the hydrologic cycle, flood analysis, and water use/water policy are emphasized.

#### PLN 5400-PLANNING THEORY & PROCESS

Foundations of community and regional planning, including linkages with planning theory and growth management, comprehensive planning steps, and how practicing planners use various planning aspects and applications to address contemporary urban and regional issues.

#### PLN 5420-HUM SETTLEMENTS PLANNING HIS

Foundations of community and regional planning relating to the growth and development of cities and historical aspects of planning. Examination of how design and form impact the built environment, to include prominent planners who have influenced planning over time. This course focuses on the American city, but some examples may be from European and Asian countries and colonial practices.

#### PLN 5425-TASK-ORIENTED GRP FACIL METH

Learn how to maximize the collective power of groups, organizations, and communities by developing facilitation skills that help groups think, talk, and work together. Application opportunities using these skills include community development, organizational planning, education, government, and other occasions when people want to turn ideas into productive action and meaningful accomplishments.

#### PLN 5431-PLANNING METHODS TECHNIQUES

Foundations of community and regional planning relating to skills, knowledge, and abilities that practicing planners use to develop a better understanding of place. Scope of research includes components of plan-making (e.g., public opinion surveying; meeting facilitation; and demographic, economic, social, environmental, housing, land use, circulation, and community facilities studies).

#### PLN 5460-ENVIRON POLICY & PLANNING

An in-depth look at issues of public participation and involvement, intergovernmental relations, and the tools and practices involved with environmental planning in the United States.

#### PLN 5470-COMMUNITY DEVELOPMENT

A study of conventional and alternative strategies used by community development professionals, activists, and community members in urban and rural settings. Community development issues will be discussed, including poverty and race, affordable housing, economic revitalization, environmental justice, and public participation in planning.

#### PLN 5730-LAND USE CTRLS PL LAW ETHICS

Foundations of community and regional planning relating to plan implementation, including a spectrum of land use controls, the legal and constitutional framework of land use controls, and planning ethics.

#### GLY 5630-HYDROGEOLOGY

The occurrence of groundwater resources; factors governing groundwater movement through aquifers; and an analysis of techniques for measuring a water resource are the focus of this course. Groundwater contamination and remediation methods will be introduced.

#### GLY 5705-ADV ENVIR & ENGINEER GLY

Field and laboratory analysis of problems arising from interactions between humans and Earth and application of geologic knowledge to the mitigation of these problems. Lecture two hours, laboratory three hours. Prerequisites: a minimum of six semester hours of geology courses above the 1000 level, or permission of the instructor.

#### HIS 5208-SEM IN APPALACHIAN HIST

A seminar exploring topics designed to define the history of Appalachia. Participants will develop research projects based upon the use and interpretation of original source materials. A variety of inquiry models will be employed, including traditional approaches as well as those employed in the new social history.

#### HIS 5306-RDGS SEM LATIN AMER HISTORY

Variable content. Course will emphasize significant fields of historical study in the area of Latin American history. Strong emphasis will be placed on current scholarship and bibliography

#### HIS 5307-RESEARCH SEM LATIN AMER HIST

Seminars will give students practical experience in examination and interpretation of primary and secondary sources, with emphasis on defining the topic to be researched, assessing its significance within the field of Latin American history, and methodological problems and issues.

#### HIS 5406-RDGS SMR AFRN MID EST ASN HIST

Course will emphasize significant fields of historical study in the area of Asian history. Strong emphasis will be placed on current scholarship and bibliography.

#### HIS 5583-AMER ENVIRONMENTAL HISTORY

An overview of Americans' interaction with the natural world from colonization to the present. Emphasis on: Native Americans' relationship to the land; the environmental effects of European settlement; the growth of agriculture and industry; conservation and preservation; atomic energy; chemical pesticides, and the modern environmental movement. The course is of particular interest to public historians, cultural resource managers, planners and environmental specialists.

#### HIS 5584-AMERICA'S NATIONAL PARKS

A survey of the history of America's national parks from the nineteenth century to the present. Emphasis on: Americans' changing ideas about wilderness preservation, the early history of Yosemite and Yellowstone, the role of railroads in park promotion, removal of Native Americans and white settlers from park sites, establishment of the National Park Service, the impact of the automobile on tourism, the creation of national parks in the eastern U.S., wildlife policy, overcrowding and other problems facing the parks.

#### MAT 5415-SEM IN PEDAGOGY OF MATH

Topics from mathematics and pedagogy are examined, such as research methods, recent advances in mathematics, alternative learning styles, teaching developmental and adult students, and teaching with technology. Students will share their experiences from the corequisite teaching apprenticeship. This course may be repeated for a total credit of three semester hours.

#### MAT 5420-TEACHING APPRENTICESHIP

This course provides a supervised experience in college teaching through direct participation in a classroom situation. Each student will work closely with a faculty mentor teaching an undergraduate course and will be actively engaged in the development of activities and assignments. Students will share their experiences in the corequisite seminar.

#### MAT 5952-PROBLEM SOLVING

Problem solving is the focus of this course. There is an emphasis on building new mathematical knowledge through work with problems and applying a wide variety of strategies to solve problems and adapt the strategies to new situations. Problems may be drawn from algebra, geometry, number theory, calculus, probability and statistics.

**MAT 5965-INFORMAL GEOMETRY**

An informal treatment of all aspects of geometry. The topics considered include congruence, measure of segments and angles, constructions, parallels and parallelograms, similarity, space geometry, areas and volumes, and measurements related to circles.

**REL 5400-RELIGION IN APPALACHIA**

An examination of the origins, history, contemporary practices, and beliefs of the people of the Southern Appalachia region. Attention will be given to religion within the formal structure of the church, within the social structures of mountain life and as a component of individual identity.

**C J 5180-PUB POL ANALY PROG EVAL**

An examination of the major forces that influence the formation, implementation and administration of public policy and methodological approaches to assess the impact of public policies.

**P A 5060-SEMINAR PUBLIC ADMINISTRATN**

History and development of the field of public administration with focus on the role of the administrator in the political process. Analysis of public agencies in a political context. Consideration of contemporary issues related to the field such as administrative ethics, decision making, and strategic planning.

**P A 5140-EMER MANAGEMENT SYSTEMS**

This course covers the roles and responsibilities of local, state and federal government agencies in times of disaster. Four key actions (planning, response, recovery and mitigation) are highlighted in understanding the changing role of government vis-à-vis individuals and businesses in minimizing loss of life and property due to natural, technological and terrorist actions. This course focuses on preparedness planning issues, intergovernmental relations, financial support for affected communities, and the changing requirements for professional development in Emergency Management in the 21st Century.

**P A 5180-PUB POL ANALY PROG EVAL**

An examination of the major forces that influence the formation, implementation and administration of public policy and methodological approaches to assess the impact of public policies.

**P A 5260-ORGANIZ THEORY & BEHAVIOR**

An examination of the basic theoretical approaches and issues in organizations and organizational behavior and the dynamics of human interactions within public bureaucracies.

**P A 5270-NOT-FOR-PROFIT ORGANIZATIONS**

An overview of the voluntary sector with emphasis on the administration and management of not-for-profit organizations. Areas of study will include theories on the development of not for profit organizations, government-nonprofit relationships, and advocacy efforts. Techniques of nonprofit management will include emphasis on ethics, board/volunteer recruitment, and marketing as well as grants and other funding sources.

**P A 5271-GRANTS STRAT & PREPARATIONS**

Overview of the grants arena in the U.S., with emphasis on the techniques of proposal preparation. Topics include the history of the grants system, types of grants, sources of funding, application process, and contract administration. Practical exercises in identifying funding opportunities, preparing elements of a grant application, and scoring completed proposals are incorporated.



P A 5460-BUDGET & FISCAL ADMIN

The politics of budgeting, budgetary process, and fiscal administration in public and non-profit agencies.

P A 5560-LOCAL GOVT ADMINISTRATION

Administrative process, management, personnel, budget and finance, and intergovernmental relations in local government.

P A 5665-PUBLIC MANAGEMENT

A study of the organization and operation of government agencies and their role in policy making and implementation and an examination of the various concepts and theories pertaining to administrative behavior and to the performance of the basic tasks of management.

P S 5010-SEM IN POLITICAL PHILOS

The seminar will provide an overview and critique of the literature in the field of political philosophy from the Enlightenment to the present.

P S 5030-SEM IN AM GOVT & POLIT

Special investigation of selected topics in American government and politics. Topics will vary from year to year. Barring duplication of content, a student may repeat the course for a total of six credit hours.

P S 5110-CAMPAIGNS & ELECTIONS

An examination of the theoretical approaches used to study American campaigns and elections. The course will examine research on public opinion, voting behavior, campaign strategies, turnout, and electoral outcomes at the local, state and national levels of government.

P S 5120-RDGS RES IN INTL RELAT

The course explores the problems and issues confronting international politics, new theoretical perspectives, and trends in the field of international relations. Topics may vary from semester to semester.

P S 5125-READINGS & RSRCH COMPAR POL

The course explores the problems and issues in various political systems, new theoretical perspectives of studying politics, and trends in the field of comparative politics.

P S 5145-AM POLIT PARTIES & INT GROUP

An examination of the history, formation and maintenance of American political parties and interest groups. Existing literature and the theoretical importance of these intermediaries in the political process will be evaluated. The roles of parties and interest groups as organizations, the roles they play in electoral politics, how they mobilize voters, and their roles in government will be examined.

P S 5640-STUDIES REG POL PATTERNS

An examination of selected regions of the world which have common historical and cultural patterns influencing their political styles and capabilities. Topics may vary from semester to semester.

P S 5670-ADV ENVIRONMENTAL POLITICS

This course examines the role that politics and government play in dealing with environmental issues. Its focus is primarily on the U.S. approach to environmental protection, but some attention will be devoted to international environmental relationships such as the Kyoto Protocol. The course will cover the history of environmental policy, the legal and institutional arrangements for environmental protection, major environmental controversies and global environmental concerns.

P S 5710-AMER POLITICAL THOUGHT

A survey of the diverse political ideas represented in the American state from the colonial period to the present. Special emphasis is given to the political problems that emerge with the process of industrialization and the movement into a postindustrial economy.

P S 5721-HUMAN RIGHTS

The course surveys the major literature in the field of international human rights. It investigates the questions of ethics, morality and the practice of human rights globally and attempts to address why the issue of international human rights has come to the fore in international politics.

P S 5722-U.S. FOREIGN POLICY

Investigates U.S. foreign policy from differing perspectives, focusing in on the historical record and contemporary issues.

P S 5723-INT'L POLITICAL ECONOMY

An examination of the relationship between political and economic activity, the way actors use one to manipulate the other, and the normative choices involved in doing so.

P S 5741-EUROPEAN GOVT & POLITICS

An examination of patterns of governmental organization and socioeconomic policy outcomes in the democracies of Europe as a basis for comparative analysis. Major issues confronting the democracies will be studied for possible options and comparisons of policy.

P S 5742-POLITICS DEVELOP NATIONS

Focuses on the efforts of a majority of the world's governments to meet the twin challenges of participatory politics and of the Global market economy.

P S 5743-THE EUROPEAN UNION

The emergence of the European Union is one of the major events in European history. The course explores the genesis and evolution of the idea of European integration and chronicles its organizational development in the post WWII era. Emphasis is placed on the politics of integration and the emergence of the Union as a major participant in world events.

P S 5744-MIDDLE EAST POLITICS

An examination of the political, cultural, economic and social patterns of the Middle East.

P S 5745-AFRICAN POLITICS

The course begins with the historical context of African politics. Then, it explores the problems of governance following independence and discusses the contemporary debate between two contending schools of thought in African politics and development: Afro-optimism and Afro-pessimism. It examines Africa's relations with developing and developed countries as well.

P S 5748-LATIN AMERICAN POLITICS

Examines Latin American politics in detail covering historical context, political actors, and current issues in Latin America.

PHY 5002-APPLIED PHYSICS LITERAT

An introduction to technical and research journals in the areas of physics, electronics and astronomy. Methods and references for use in literature searches, including computer methods, and the preparation of technical papers will be examined.

PHY 5820-MEDICAL PHYSICS

A study of the application of the basic principles of physics to a selection of medical topics involving human body characteristics and functions and to instrumentation used to diagnose and treat illness and injury.

PSY 5011-TEACHING OF PSYCHOLOGY

A course required of all graduate teaching assistants responsible for teaching one or more sections of PSY 1200 (General Psychology). Students will be introduced to alternative teaching approaches, guided in constructing tests, and provided information about teaching resources. Students' success in teaching will be evaluated.

#### PSY 5020-RESEARCH METHODS IN PSY

An examination of the procedures and principles involved with experimental, quasi-experimental, and other non-experimental research, including problem formulation, literature review, measurement issues, sampling, research design, data analysis, and report writing using APA format.

#### PSY 5030-QUANTITATIVE METH IN PSY

This course continues the content of PSY 5020 and examines research/quantitative methods used in psychology. Students learn how to plan, structure, conduct and interpret statistical analyses.

#### PSY 5040-APPL PSYCHOLOG RSRCH & EVAL

This course provides students with the opportunity to acquire skills necessary to perform independent research and evaluation in field settings. It continues the content of PSY 5020 for those students who will be employed in applied settings (e.g., schools, hospitals, and governmental agencies).

#### PSY 5065-ORGANIZATIONAL DEVELOP

A study of the processes by which behavioral science knowledge and practices are used to help organizations achieve greater effectiveness. Emphasis on the nature, history, assumptions, strategies and models, intervention techniques, and ramifications of organizing development. (

#### PSY 5150-PRO-SEM I: LEARN & COGNITION

This course includes a critical evaluation of current issues and research in cognition and learning, and provides a historical account of important developments in these areas.

#### PSY 5200-PRO-SEM II:SOC & PERSON PSY

This course includes a critical evaluation of current issues and research in social and personality psychology, and provides a historical account of important developments in these areas.

#### PSY 5208-FORENSIC PSYCHOLOGY

This course will provide an in-depth study of the ways in which psychology and the law interact. It will include a study of the way in which researchers and mental health professionals contribute to legal issues as well as the ways in which research and mental health practice are governed by the law.

#### PSY 5250-PRO-SEM III: BIOPSY/DEV PSY

This course includes a critical evaluation of current issues and research in biopsychology and developmental psychology, and provides a historical account of important developments in these areas.

#### PSY 5552-DIAGNOSIS & PSYCHOPATHOLOGY

Consideration of diagnostic practices of common psychological disorders, including symptom criteria, epidemiological data, with an emphasis on the acquisition of applied diagnostic skills.

#### PSY 5555-ADV EDUCATIONAL PSY

An exploration of how learning theory can be applied in the school environment by teachers, counselors, and administrators to enhance the learning experience.

#### PSY 5562-PSYCH OF ADULTHOOD & AGING

A study of the physical, cognitive, social, and emotional development of adults. The psychological changes associated with the process of aging will be emphasized, with particular focus on cognitive and personality factors.

#### PSY 5565-ADOLESCENT PSYCHOLOGY

An examination of the physical, intellectual, and emotional changes that occur during adolescence. Relationships among physical development, mental growth, adolescent interests, personality, and social consciousness, will be explored.

#### PSY 5593-BIOFEEDBACK

This course will review the historical background of biofeedback, stressing biofeedback as an aid in stress management, in the treatment of psychosomatic disorders and muscle relaxation, and in the physiological basis of self regulation. Students will have the opportunity to become familiar with the application of the EMC, ST trainer and other biofeedback instrumentation through demonstration and practice.

#### PSY 5610-ADV EXPERIMENTAL PSYCH

A critical study of the major experimental findings and of research methodology in contemporary psychology. Emphasis will be placed upon problems in human learning and cognition.

#### PSY 5655-CONTEMPORARY ISSUES PSYCHOLOGY

An investigation and discussion of psychological phenomena utilizing the scientific method and empirical research to evaluate causal claims, evaluate research, assess validity, and engage critical thinking. A focus of the class will be the use of empirical research literature, as well as oral and written assignments to improve reasoning skills in order to become a more critical consumer of information from both academic and popular sources.

#### PSY 5660-STAFFING

A study of techniques used in employee selection and placement. Emphasis is on job and task analysis and the application of psychology in recruitment, biographical data, interviewing, work samples, assessment centers, rating scales, and testing.

#### PSY 5661-PERFORMANCE MANAGEMENT

The study of methods used to describe and measure work behavior. Specific attention is given to developing competencies in job analysis and performance management in order to facilitate the evaluation of employee contributions to organizational success.

#### PSY 5671-TRAINING & DEVELOPMENT

A study of the roles, functions, and skills of human resource development professionals. Consideration given to such topics as the philosophy and psychology of HRD, the design and implementation of training and development programs, and the major program areas and organizational settings for HRD.

#### PSY 5672-ADV ORGANIZATIONAL PSYCH

An examination of theory and research focused on individual and social processes in organizations. Topics include organizational research methods, job attitudes, mood, work stress, motivation, leadership, work groups and teams, prosocial behaviors, organizational culture and climate, and organizational theory and structure.

#### PSY 5700-COGNITIVE ASSESSMENT

A practice-based study of the development, standardization, and interpretation of a variety of cognitive and developmental measures including the Wechsler Scales and selected other individually administered psychometric instruments. Supervised practice in administration, scoring, and interpretation is provided.

#### PSY 5701-PERSONALITY ASSESSMENT

A survey of the underlying theory, reliability, validity, and utility of several individually-administered personality assessment devices. Practice in administration, scoring, interpretation and report writing is included.

#### PSY 5705-PSYCHOTHERAPY: FDN & ETHICS

This course involves learning fundamental clinical skills including interviewing and basic clinical interventions. Legal and ethical principles in the practice of clinical psychology are considered.

#### PSY 5713-CHILD PSYCHOPATHOLOGY

A critical evaluation of the development of common psychological disorders in children and adolescents. The emphasis will be on developing skills in differential diagnosis and understanding current research on etiology.

#### PSY 5714-PSYCHOTHERAPY INTERV I

A critical evaluation of the current major approaches to and research concerning psychotherapeutic behavior change with adults. A systematic review of empirically verified treatments for the most prevalent disorders will be provided.

#### PSY 5715-PSYCHOTHERAPY INTERV II

A critical evaluation of the current treatments for bipolar disorder, schizophrenia, trauma-based disorders, personality disorders, and sexual dysfunctions. The empirical literature will be reviewed, and students will have the opportunity to learn to apply empirically verified treatment techniques for these disorders.

#### PSY 5716-INTERV FOR CHLDRN & ADOLESCENT

The main emphasis in the class will be on developing the necessary knowledge to effectively implement empirically supported interventions for children and adolescents in clinical and school settings. An in-depth review of the treatments for the most common childhood disorders will be provided.

#### PSY 5717-PRESCHL LOW INCIDENCE ASSMNT

Advanced, practice-based study of psychoeducational assessment and intervention for preschoolers and children with low-incidence disabilities. Pertinent legal, ethical, and diversity issues and relevant federal regulations will be examined. Supervised practice with actual cases will be provided.

#### PSY 5800-APPL BEHAVIOR MANAGEMENT

An advanced study of the philosophy, principles and procedures of applied behavior analysis and a review of selected research. Practical, ethical, and legal constraints on behavioral interventions are considered. Research conducted in institutional, educational and home settings is emphasized.

#### PSY 5810-FUNCT & ETHICS OF SCHL PSY

As an introduction to the profession of school psychology, this course will review the history of the field and important current theoretical, legal, and ethical aspects of the practice of school psychology.

#### PSY 5820-PSYCHOED PREVTN & INTERVENTION

This course is designed to provide both system level and school-based prevention and interventions to effectively meet the increased needs of children. The course will also discuss effective evaluation of such programs.

#### PSY 5901-PRACTICUM I: SCHOOL PSYCHOLOGY

This course is limited to graduate students in school psychology. The student will be placed in a public school setting one full day a week under professional supervision (both on site and in the university classroom). A minimum of 135 supervised clock hours must be completed. Tasks accomplished are commensurate with level of training. Graded on an S/U basis.

#### PSY 5902-PRACTICUM II:SCHOOL PSYCHOLOGY

This course is limited to advanced graduate students in school psychology. The student will be placed in a public school or equivalent setting based on background and needs. Students work under on-site supervision and must attain a minimum of 135 supervised clock hours. Tasks accomplished are commensurate with level of training. Graded on an S/U basis.

#### PSY 5904-PRACTICUM I: CLIN HEALTH PSYC

Students will train in a professional mental health or medical setting for the equivalent of one day per week. Supervision is provided on-site by staff psychologists or other professionals. Weekly class meetings supplement the on-site training to provide additional group supervision as well as coverage of professional issues.

#### PSY 5905-PRACTICUM II: CLIN HEALTH PSYC

Students will train in a professional mental health or medical setting for the equivalent of one day per week. Supervision is provided on-site by staff psychologists or other professionals. Clinical experience is arranged as appropriate for the student's level of training. Weekly class meetings supplement the on-site training to provide additional group supervision as well as coverage of professional issues. Graded on an S/U basis.

#### PSY 6620-SCHL-BASED CONSULTATION

For school psychologists, counselors and other human service personnel in various fields who deal with parents and/or teachers in a consultative and educational capacity. The course will include a review of consultation models and theories of both a group and triadic nature. It will also provide an opportunity for role play which reflects actual consulting situations. Emphasis will be placed on concerns related to academic deficit, behavioral problems in the school and home, and family stress.

#### SOC 5025-ADV GENERAL SOCIOLOGY

Systematic critical analysis of the state of the sociology discipline and of major sociological principles and ideas.

#### SOC 5300-APPALACHIA SOC CONTEXT

Examines the social relationships among the people who inhabit the geographical region known as Appalachia. Focus upon the social history, demography, and social institutions of the region.

#### SOC 5350-CONTEMP SOCIAL ISSUES

A critical analysis of some of the major social issues in American society. Emphasis will be placed upon the theoretical and empirical implications of social attitudes toward the explanation, treatment, and public policy decisions related to these issues.

#### SOC 5420-HEALTH CARE AND AGING

An analysis of how aging related changes impact the range and delivery of health care programs. Issues considered include health, long-term care, elder abuse, family care giving patterns, health insurance models, and how cost, quality, and access impact health care for the elderly.

#### SOC 5560-RACE & MINORITY RELATIONS

Examination of intergroup relations, including racial, ethnic, and women's issues; the bases of conflict, accommodation, and assimilation; the nature and consequences of prejudice and discrimination; evaluation of proposals for reduction or elimination of prejudice and discrimination

#### SOC 5600-POLITICAL SOCIOLOGY

An analysis of the social influences on political behavior, the relationship between political and other institutions, the uses and abuses of political power.

#### SOC 5630-PROG & SERV FOR OLDER ADULTS

This course focuses on both policy and practice issues related to services for older adults. Drawing on research from both sociology and social work, the long-term impact of an aging society on social institutions as well as relevant modes of practice in addressing the needs of the older population are emphasized.

#### SOC 5710-RURAL & URBAN COMMUNITIES

Analysis of the structure and functioning of rural and urban communities; social organization and change within and among communities.

#### SOC 5750-SOCIAL STRATIFICATION

A study of the distribution of wealth, power, privilege, and prestige. The course examines conservative, liberal, and radical explanations of human inequality. Cross-cultural and comparative analysis is used **to focus on various problems of inequality and their consequences.**

#### SOC 5950-GLOBALIZATION & POPULATION

This course examines how worldwide changes have given rise to global organizations, global inequities and some environmental degradation. Special emphasis is placed on how the population dynamics of fertility, mortality and migration underlie many global issues and create new conflicts.

#### ACC 5210-ADV MANAGERIAL ACC

Focus is on the controller's role in the decision-making process. Integration of accounting knowledge with other business and non-business disciplines is an important objective of this course. Topics may include, but are not limited to: cost behavior patterns, inventory planning and control, job-order and process costing, manufacturing cost systems, budgeting concepts, cost allocation, direct vs. absorption costing, transfer pricing and overhead application.

#### ACC 5380-MULTIJURISDICTIONAL TAXATION

A study of state and local tax laws including income, franchise, property, sales and use and excise taxes. The state and local taxation of individual and business entities is covered and planning opportunities are discussed. Additionally, the course examines the U.S. laws of international taxation as well as tax issues affecting U.S. multinational companies.

#### MBA 5750-STRATEGIC MANAGEMENT

This course focuses on how managers and executives formulate and implement strategy in order to improve long-term performance. Each session emphasizes the development of frameworks that can be used to analyze the topic. Topics include defining the firm's mission, performance, industry structure, strategic coherence, business-level strategy, vertical integration, diversification, mergers and acquisitions, top management teams, management of innovation, corporate governance, business ethics, organizational structure and control, strategy implementation, global strategy, and leadership. Case analysis, in-class exercises and presentations, and written assignments are used to improve working knowledge of each topic. Prerequisite: admission to the MBA Program or permission of the instructor.

#### CIS 5250-ISSUES IN E-BUSINESS

This course examines the concepts and issues associated with using the technologies and processes of electronic commerce to facilitate the operational success of a contemporary organization. Through extensive use of the Internet, students will gain direct experience with the promise, problems and potential of using information technology and electronic commerce in individual and organizational endeavors.

#### CIS 5280-SYSTEMS MANAGEMENT

Introduction to General Systems Theory and its application to the analysis, design, and operation of information systems. Emphasis will be placed on the design and management of information technology, cybernetics, real-time systems, models and simulations, and man-machine systems.

#### CIS 5300-MANAGING INFORM TECHNOLOGY

A seminar course providing a broad overview of the information systems management function. Emphasis on information systems management, with particular attention on planning, organizing, and controlling user services and managing the computer information systems development process.

## CIS 5350-ADV DATABASE CONCEPTS

Investigation and application of advanced database concepts including Database Administration, database technology and selection and acquisition of database management systems.

## CIS 5580-DATA COMMUNIC & NETWORK

This course is designed to provide the student with the basic concepts of data communications and networks. Emphasis will be on the technical and the theoretical skills of data communications and networks that will be needed by those who will be involved in the analysis, design and programming of computer information systems.

## CIS 5585-ADV DATA COMM & NETWORKING

This course is a continuation of CIS 5280 and explores advanced topics in data communications and networking. It encompasses parts 3 and 4 of the CCNA (Cisco Certified Network Associate) certification and, upon successful completion, allows students to take the CCNA certification exam.

## CIS 5610-GLOBAL INFO TECHNOLOGIES

This course presents students with the concepts and issues inherent in global information technology. The course examines the issues associated with using technology in a global environment, how global systems are developed, how culture, language, etc. impact systems and their development, outsourcing, strategies for global systems development and use, and issues facing Far East, European, Latin America, and Third World countries.

## CIS 5620-IS STRATEGY POLICY & GOVERN

This course examines how to effectively lead an information systems organization. Chief Information Officers are tasked to take part in determining corporate strategy based on information technology and its potential role in corporate objectives - while determining the IS (Information System) strategy to most effectively implement the corporate strategy in terms of information technology, IS personnel, data, and telecommunications. That IS strategy will also be implemented in terms of an IS policy, and then executed as IS governance. IS governance will include personnel issues, legal and financial obligations, data privacy and security, vendor relations, and business unit liaison.

## CIS 5630-DATA MANAGEMENT

Data mining is a broad area dealing with the analysis of a large volume of data that integrates techniques from several fields including machine learning, statistics, pattern recognition, artificial intelligence, and database systems. Data mining is a rapidly growing field that supports decision-making by detecting patterns, devising rules, identifying new decision alternatives and making predictions about the future. The course objective is to present the leading data mining methods and their application to real-world problems. The course is organized around a number of well-defined data mining tasks such as description, classifications, estimation, predictions, and affinity grouping and clustering.

## CIS 5710-E-BUSINESS SYSTEMS

This seminar course discusses e-business issues that are current, applicable, relevant, and interesting. Students are expected to develop and execute a team project throughout the course. Relevant areas of e-business studied will include: electronic commerce, personalization management systems, content management systems, customer relations management systems, and community systems. This course ties together concepts from different areas of management and the economic, behavioral, functional and technical aspects of information systems.

## CIS 5720-ADV INTERNET TECHNOLOGIES



In this course, students will have the opportunity to learn the technologies that are commonly used to develop e-business. These enabling technologies include ASP.NET, VB Script, Java2EE, XML, Web Service, XHTML, DHTML, Java Script, JSP, among others. The technologies that this course incorporates may change based upon current industry trends. This course concentrates on the skills to use these technologies and the business processes that drive Internet development, so that students are able to develop a robust, reliable, functional, and secure industry-level e-business web site.

#### CIS 5830-SECURITY, PRIVACY & ETHICAL ISS

This course is designed as a broad overview of important security topics that are relevant to people and businesses. Relevant areas of security that will be studied include: the need for security on a personal and business level, the management practices surrounding security issues, network security strategies, human factors, access, firewalls, disaster recovery plans, personal security issues, personal and business forensics issues.

#### CIS 5840-ADVANCED SECURITY

This course is designed to cover the main common body of knowledge topics identified by the Certified Information Systems Security Professional (CISSP) certification program. Topics include security management practices, access control, security models and architecture, physical security, telecommunications and networking security, cryptography, disaster recovery and business continuity, law, investigation, ethics, applications and systems development, computer forensics and, operations security.

#### CIS 5850-BUSINESS ANALYTICS PROJECT

Using a team concept, students will analyze, design, create, and implement a working information system for a public or private organization. Emphasis will be placed on project management, rapid application development, and the development of quality systems for clients.

#### MGT 5065-ORGANIZATIONAL DEVELOP

A study of the process by which behavioral science knowledge and practices are used to help organizations achieve greater effectiveness. Emphasis on nature, history, assumptions, strategies and models, intervention techniques, and ramifications of organizing development.

#### MGT 5160-STRAT HUMAN RESOURCE MGT

Designed as a capstone course in the interdisciplinary M.A. degree in Industrial- Organizational Psychology and Human Resource Management. A study of human resource policy and strategy and their application to the solution of strategic problems of the firm.

#### MGT 5450-NEW VENTURE MANAGEMENT

An examination of the requisites associated with successful development and implementation of innovative strategies and new ventures in both entrepreneurial and intreprenurial environments. Among the factors to be considered are the feasibility, operational planning, funding, initiation, and followthrough of innovative ventures.

#### MGT 5570-COMPENSATION

This course presents practical tools, methods, and a systems perspective to help advance students' understanding of human resource management. The course covers compensation, benefits and related human resource functions such as performance appraisal, job analysis and selection practices.

#### MGT 5630-LABOR RELATIONS

A study of labor-management relations with emphasis on management's relations with organized labor. Lecture, discussion and cases are used to study the reasons employees join unions, the laws that apply, and the process of working out a labor contract after it is negotiated.

#### MGT 5661-PERFORMANCE MANAGEMENT

The study of methods used to describe and measure work behavior. Specific attention is given to developing competencies in job analysis and performance management in order to facilitate the evaluation of employee contributions to organizational success.

#### MGT 5700-CONTEMP ISSUES MGT & LDRSHP

This course is designed to explore theories and practical applications of management and leadership in organizational settings. The major emphasis is on building the managerial and leadership skills necessary to diagnose and provide remedies for organizational level problems.

#### MGT 5770-BUSINESS ETHICS

A study of the economic, legal, political, and social environment within which business process takes place; how such environment affects the decisions managers must make.

#### MKT 5610-CONSUMER BEHAVIOR

An examination of the psychological, sociological, and economic theories of buyer behavior. This is followed by analysis of the major current and classical empirical research studies designed to test the different theories of buyer behavior.

#### B E 5510-OFFICE MANAGEMENT

Study of the responsibilities, problems and duties of the office manager approached from a management viewpoint; study made in managing the modern office from both a traditional and computerized office systems approaches; study of administering systems and procedures in office work and expansion of knowledge and techniques used to reduce and control office costs.

#### B E 5555-ADV METH TCH BUS & MKT SUBJ

This course provides students advanced methodology and classroom strategies in business and marketing education. It places emphasis on current issues such as: best pedagogical practices for business and marketing subjects taught within the school setting, emerging learning environments in which all learners can be successful, authentic assessment appropriate to diverse learners, use of technology to enhance teaching and learning, innovative teaching strategies to design and modify instruction.

#### B E 5565-CURR DEV IN BUS & MKT EDUC

This course provides students with understanding of principles for curriculum design, development, and implementation in business and marketing education. The content focuses on contemporary curriculum design and implementation strategies, a discussion of curriculum development for school-to-work transition, formulation of specific curriculum goals and objectives, identification and selection of relevant curriculum materials, and systematic assessment of the business and marketing education curriculum.

#### B E 5660-CLASSROOM MGT & ASSESSMENT

In this course, electronic office systems and equipment from an end-user perspective are explored. The course includes work in a variety of information processing applications such as word processing, spreadsheets, databases, presentation software, graphics, electronic mail, Internet applications, web page design, and integrated projects.

#### B E 5850-MGT OCCUP ED YOUTH ORG

A study of how to organize and administer youth organization in occupational business and marketing education for teachers in order to establish an excellent learning situation.

#### C I 5045-ADVANCED TOPICS IN DIVERSITY

A framework of theories on diversity and multicultural issues is constructed in this course. From these theories, practical applications will be derived. Research focusing on creating productive and equitable learning environments, on best practices collaboration, and on instructional accommodations and modifications will be examined.

#### C I 5075-ADV STUDY ELEMENTARY SCHL SCI

Advanced Study in Elementary School Science is designed for elementary teachers or specialists who wish to further develop their content knowledge and critically examine existing pedagogical practices. The course focuses on the understanding of scientific concepts and principles; interdisciplinary planning and implementation; infusion of community resources and local funding into the elementary science program; and contemporary issues specific to the teaching, learning, and evaluation of science curricula.

#### C I 5080-ADV STUDY ELEM SCHL SOCL STUD

Designed for elementary teachers to build on their content knowledge about the social studies (including history, political science, and geography). Includes analysis of ideological views about the purpose of the social studies, current issues in social studies, and on-going debates about social studies curriculum standards at the national and state levels. Specific topics will include research-based teaching strategies, connecting learners to social studies content, developing in-depth subject matter integration, social studies for social justice, and advocating for the social studies.

#### C I 5130-RECENT TRENDS & ISSUES IN ED

Designed for elementary teachers to deepen their understanding of significant issues and trends in education at both the national and international levels. Specific topics include: current debates about assessment and high stakes testing; research in comparative education; the health status of children; and analysis of current issues affecting school, family and community relationships.

#### C I 5635-MEDIA LITERACY & PROG DEVEL

In this course, media literacy is placed within the traditional and emerging models of mass communication. The course includes an examination of British, Australian and Canadian approaches to media education within their respective school systems. Students are required to develop a rationale that links media literacy to traditional and emerging goals in American education. An interdisciplinary approach is used to explore media literacy as both a revolutionary and evolutionary concept. In addition to examining media literacy as a competency or area for specific study, literacy is also addressed in terms of classroom methodology and pedagogy. American schools are analyzed in terms of the way their organizational culture and characteristics impact innovations such as media literacy.

#### C I 5636-EMER ISS TRENDS MEDIA/TECH

Focuses on trends and developments in educational media, technology, and media literacy. Students will address contemporary issues, trends, controversies, and techniques. Topics may vary from year to year; repeatable for up to nine semester hours.

#### C I 5750-TEACH DIVERSE YNG ADOLESCENTS

This course provides middle grades teachers with a variety of research-based instructional strategies that are developmentally appropriate for young adolescents. Special emphasis is placed on the selection, implementation, and evaluation of instructional strategies that promote cognitive, physical, emotional, and social development and increase student learning.

#### C I 5810-INTRO TO SIGHT & SOUND

An introduction to the basic knowledge and skills underlying any effective audiovisual presentation. Students will have the opportunity to learn the aural and visual aesthetic principles involved in the creation of effective media presentations. They will also have the opportunity to learn the theory and operation of various common sight and sound devices, including audio tape recorders; microphones and mixers; still cameras; video cameras, monitors, and recording devices; projection devices and presentation systems. Emphasis will be placed not only on understanding how the equipment works, but on the common theoretical background shared by all these communication devices.

#### C I 5830-MEDIA LITERACY

The course examines what it means to be literate in a media era. Key concepts and principles from the field of media literacy are studied through an examination of motion pictures, advertising, television, photo journalism, broadcast news, and the Internet. Emphasis is placed upon understanding media texts, media industries, media narratives, and the form and language of a variety of different media. Students are provided with critical frameworks for analyzing media as well as with tools and techniques to be applied in several class projects aimed at deconstructing media messages.

C I 6460-ISS TREND PROB CURR, K-9

Analysis of current practices, problems, and trends in education with emphasis on improved programs.

C I 7131-EMERGING ISSUES IN C&I

Within the context of educational leadership, the purpose of this course is to provide doctoral level students with an in-depth understanding of issues, problems, and trends in curriculum and instruction at the local, state and national levels. The course is also aimed at providing students with experiences which lead to an understanding of the interdisciplinary nature of problem setting, problem solving, and policy analysis in curriculum and instruction.

HED 5650-DRUG EDUC & PREVENTION

The primary focus of this course is to introduce the complexities of drug-related The social, psychological, pharmacological, cultural, educational and political aspects of drug use, including alcohol and tobacco, are examined. In addition, the methods, materials and theories of drug abuse prevention in the school and community are discussed.

HED 5710-TCH SEX ED W/IN FAM CONT

This course is designed to help health educators learn and develop strategies for teaching family living and sexuality to different age groups such as elementary, middle grades, secondary and adults. Topics to be included are reproductive anatomy, physiology, STD and AIDS, varying cultural differences, and gaining community support. Each student will be responsible for developing appropriate curricular materials for the age group she or he will be teaching.

HED 5730-TCH STRESS MGT EMOT HLTH

This course will explore the factors associated with the development of emotional health and the management of stress as a basis for understanding the healthy personality. Emphasis will be directed towards teaching stress management and emotional health within an educational setting. Practical aspects of health education and program planning will be discussed. Students will be encouraged to deepen their commitment to affective teaching by applying the principles of self-esteem building, behavior self-management, communication, and accessing appropriate resources.

EDL 7011-MULTI-DIS SEM EMER ISS I

A multi-disciplinary seminar to examine current and emerging issues in society and their impact on public education. The course draws upon readings from a variety of disciplines for students to examine and to reflectively explore fundamental questions about: the nature and purpose of education; how educators conceive of and understand teaching and learning in schools and classrooms; and how educational leaders conceive of and understand the complex relations between schools, teachers, learners, and curriculum.

EDL 7012-MULTI-DIS SEM EME ISS II

A continuation of EDL 7011. This seminar will feature different professional disciplines in developing an understanding of the context of public school administration. The seminar will include comprehensive treatments of how leaders use information in shaping and communicating their vision and values throughout organizations. Students will be expected to assume more responsibility for building responses to issues presented in this seminar.

EDL 7020-ORGANIZAT & SYST THEORY

This course will integrate essential features of research in organizational theory with the more recent developments in systems theory. How people and groups organize to accomplish tasks will be combined with how organizations combine to form systems. A special feature of the course will be its treatment of organizations and systems for public, non-profit enterprises. Models and case studies will be featured.

FCS 5305-RECENT ISS HOUS & INTER

A study of recent issues in housing and interiors.

FCS 5310-HISTORIC HOUSING & RENOV

A study of historical houses and their renovation for contemporary living.

FCS 5315-HOUSING FOR THE ELDERLY

An overview of housing for the elderly including housing needs, available housing, accommodations, housing dissatisfactions, attitudes toward living arrangements, housing standards and design, congregate housing, housing disruption and site/location criteria.

FCS 5551-FAMILIES IN LATER LIFE

In-depth study of factors influencing interrelationships in family development in the later years.

FCS 5710-FCS COMMUNIC STRATEGIES

Selection, organization, and use of strategies and materials for presenting family and consumer sciences related concepts.

HPC 2200-LIFE & CAREER PLANNING

HPC 2700-PRINCIPLES OF LEADERSHIP

HPC 3150-PEER LEADER SEMINAR

HPC 4300-ADV STUDENT LDRSHIP DEV

HPC 4570-THE ADDICTIVE PROCESS

HPC 4710-TCH SEX ED W/IN FAM CONT

HPC 4840-HUMAN REL & INTERACTION

HPC 5100-COUNSEL TECH TCHRS YOUNG ADOL

Acquaint teachers of early adolescents with appropriate counseling techniques, interactional processes, and resource materials.

HPC 5110-MULTICULTURAL COUNSELING

An exploration of counseling issues related to a culturally diverse client population.

HPC 5120-INTROD CLINICL MNTL HLTH COUNS

An introduction to the issues, functions and scope of the work being done in various human service agencies. Helping approaches with selected client populations and related professional concerns will be examined.

HPC 5130-WOMEN'S ISSUES IN COUNSL

Based on study of historical, social, multicultural, and familial influences on the development of women, this course addresses counseling issues related to women's identity, self-esteem and relationships.

HPC 5210-LIFE & CAREER PLANNING

Assists counselors and others in various work settings to attain knowledge and skills essential in helping individuals to consider possible careers and life style options. Approaches to career development, sources of informational materials, and the life planning needs of particular clientele are emphasized.

#### HPC 5270-THEO MARR & FAM THERAPY I

A study from the systemic perspective of the historical development, theoretical and empirical foundations, and current issues in marriage and family therapy. Major models of marriage, couple and family therapy are surveyed.

#### HPC 5271-THEO MARR & FAM THERAPY II

A study of a selected number of theories concerning marriage and family therapy. Class will involve role play, group discussion, and demonstration of marriage and family therapy.

#### HPC 5272-INDIVIDUAL & FAMILY DEVELOPMNT

An introduction to a variety of systemic theories of family. Emphasis will be given to clinical issues of family development as they pertain to family therapy.

#### HPC 5273-MEDIATION & DIVORCE THER

Recognizing divorce as a frequent phenomenon in families, this course is designed to study the history, effects, and re-growth as a result of divorce. In addition to a review of current literature, there will be a concentration on pertinent, long-term studies of divorces, and the results and effects on children, as well as viewing proposed models of mediation and therapy for persons who choose to pursue such assistance.

#### HPC 5274-SUBST ABUSE FAM SYSTEMS

An examination of the range of substance abuse issues impacting the family system. Topics will include etiology of substance abuse and addiction within the family, impact upon members of the system and its dynamics, intervention and treatment approaches, and long-term recovery issues.

#### HPC 5410-INTRO TO STUDENT AFFAIRS

An introduction and overview of student affairs functions within institutions of higher education emphasizing the history, student affairs programming models, professional standards and ethics in professional conduct, professional associations, organizational models and staffing patterns, and issues and trends in student affairs practice.

#### HPC 5440-ST AFFAIRS & GREAT OUTDOORS

The purpose of this course is to explore the connections between student affairs and outdoor education/experiential education. This course is required for the concentration in College Outdoor Program Administration under the Master of Arts degree in College Student Development. Students will have the opportunity to experience hands on training in theoretical approaches to integrating outdoor experiences into their work in student affairs.

#### HPC 5450-LEARNING COMMUNITIES

The purpose of this course is to introduce students to the concepts on Learning Communities. This will be accomplished through an understanding of the history and models of learning communities, constituents, and the institutional priorities. The academic and student affairs contexts and cultures will be explored. Additionally, students will have the opportunity to work on a project designing a learning community.

#### HPC 5560-THE ADDICTIVE PROCESS

An examination of sociological and psychological contributions to alcohol and drug addiction and abuse in our society. The addictive process and its impact on the individual and society are described, as well as treatment and preventive program efforts. Students will also examine their own feelings and attitudes about alcohol and drug use and abuse.

#### HPC 5680-COUNSELING THE AGING

This course is designed to aid graduate students interested in gerontology to understand and appreciate aging as a lifelong process. Emphasis is also given to various effects of aging physiological, psychological, financial, etc. Counseling strategies and understanding family dynamics pertaining to aging will also be studied.

HPC 5700-TCH SEX ED W/IN FAM CONT

This course is designed to help health educators learn and develop strategies for teaching family living and sexuality to different age groups such as elementary, middle grades, secondary and adults. Topics to be included are reproductive anatomy, physiology, STD and AIDS, varying cultural differences, and gaining community support.

HPC 5710-HELP TROUBLED EMPLOYEE

An introduction to employee assistance programming in a wide variety of settings. Historical development, current issues and trends, program structure, implementation, administration and evaluation are stressed. Visiting practitioners, student projects, and field trips will emphasize practical skills development in this helping model based in the work setting.

HPC 5751-ETHICS & LAW IN PROFES PRACT

A study of current legal and ethical issues confronting the college student development specialist or counselor in practice. Topics include authority and environment of ethics and law, ethical decision analysis, and topical issues such as student safety, liability, confidentiality, privacy, libel and slander, due process, and other related ethical and legal concepts. The course goal is to provide future practitioners with a working knowledge of ethical and legal issues so as to inform good practice.

HPC 5752-LGL & ETHCL ISS CLN HLTH CNSLG

A study of legal and ethical issues confronting community agency, mental health and rehabilitation counselors. Topics include moral reasoning, tort liability, confidentiality, privacy, libel, slander, due process, federal and state rules, regulations, and statutes, and other important concepts and actions resulting in legal and ethical questions.

HPC 5753-LEGAL & ETH ISS MAR FAM THER

A contextual study of legal and ethical issues related to the profession of marriage and family therapy. Topics include professional identity, scope of practice, professional organizations, licensure, ethical codes, confidentiality, legal responsibility and liabilities of clinical practice and research, family law, record keeping, reimbursement, and the business aspects of practice.

HPC 5754-LEGAL & ETH ISS PROF SCH COU

An exploration of ethical and legal standards, and applications specific to professional school counseling. General topics will include the ethical decision-making process, confidentiality, privileged communication, informed consent, duty to warn, dual relationships, record keeping, parental rights, the rights of minors, testifying in court, and testing. Special topics and the needs of special populations will be examined.

HPC 5820-COLLEGE SDNT DEV THEORIES I

This course provides an overview of the cognitive theories of student development. Particular emphasis will be placed on utilizing theory to understand and describe student learning, human behavior and development over the life span. The course includes cognitive and moral development theories. A multicultural focus will be included in the study of these theories.

HPC 5821-CLG STD DEV THEORIES II

This course provides an overview of the psychosocial theories of student development. Particular emphasis will be placed on utilizing theory to understand and describe student learning, human behavior and development over the life span. The course includes psychosocial and identity theories. A multicultural focus will be included in the study of these theories.

HPC 5840-HUMAN REL & INTERACTION

Examines the key elements in effective interpersonal communication. Students will be exposed to one or more human relations models that are designed to improve their communication skills. Emphasis will be given to applying constructive methods of human relations in a variety of settings including business, schools, and social service agencies.

#### HPC 5850-THEORY PRAC REAL THERAPY

A basic course introducing the theory and practice of Reality Therapy in a variety of therapeutic settings. Emphasis will be placed on the principles and implications of control theory, including the fundamentals of the practice of Reality Therapy, and its relationship to the cycle of counseling.

#### HPC 5870-CREATIVE PROC, MOVEMN & THER

An examination of body awareness, creative expression, and movement in therapy. Particular attention will be paid to the concept of creative process and how it relates to human development, personality integration, and healing.

#### HPC 6270-MARR FAM COUN: CLIN ISS

An examination of basic issues and special problems in the therapeutic intervention in families.

#### HPC 6271-THEO MARR & FAM THERAPY III

A comprehensive survey of major models of marriage and family therapy with emphasis on the relationship of theory to practice.

#### HPC 6272-MARITAL & COUPLES THERAPY

This seminar examines key issues associated with effective marital and couples therapy. Emphasis is given to an overview of fundamental theoretical models of intimate relationships and models for effecting healing and growth in such relationships.

#### HPC 6290-CHILD & ADOLESC THERAPY

The application of child development and counseling theories to the practice of counseling children and adolescents. Focus will be on clinical practice, diagnostic skills, play and art therapy, family systems interventions, parent training programs, and behavioral interventions.

#### HPC 6340-ECOTHERAPY

This course will examine emerging paradigms in psychology and counseling in systems theory, the nature of consciousness, and ecopsychology.

#### HPC 6350-BODY/MIND

A study of the interrelationship of physical and mental functioning as it pertains to counseling, including the mind/body problem as a systematic issue in psychology, exploration of the current resurgence of interest in mind/body functioning relative to total well-being, and an overview of current uses of mind/body experiences as therapeutic techniques.

#### HPC 6360-THERAPY & EXPRESSIVE ART

An examination of the relationship between artistic expression and individual mental health. Theories and techniques of various arts therapies will be studied relative to diagnosis and treatment as well as to personality integration and personal growth.

#### HPC 6370-INTERMODAL EXPRESSIVE ARTS

An examination of theories, techniques, and functions of psychotherapeutic approaches using intermodal expressive arts, emphasizing cross-cultural contexts of creative expression and human development.

#### HPC 6380-THERAPEUTIC WRITING

An exploration of writing and the therapeutic process. Students will experience a variety of methods in using the written word to enhance client change as well as for self-care for the therapist.

#### HPC 6390-CURR ISS IN EXPRESS ART THER

An examination of current issues in expressive arts therapy, emphasizing cross-cultural contexts of creative expression and human development.



#### HPC 6410-STUDENT DEVELOPMENT ADMN

An overview of organizational theories, management, and administration in student development practice, including budget and finance, governance and policy making, organizational change processes, process consultation, administrative uses of computers, and human resource development.

#### HPC 6451-CLNCL MENTAL HEALTH CNSLG SEMR

An examination of current issues and trends in mental health, agency and rehabilitation counseling focusing on the transition from clinical trainee to entry level practitioner in areas such as psychosocial assessment, prevention/education/intervention techniques, administration of programs, and supervision.

#### HPC 6452-SEM: PROF SCHOOL COUNSELING

This course is designed to provide opportunities for students to further develop knowledge and skills in order to deliver a comprehensive and developmental school counseling program. A wide variety of topics currently addressed in professional school counseling literature will be studied.

#### HPC 6570-APPAL ADDICTIONS INSTIT

Variable content. Barring duplication, a student may repeat the course and earn up to a total of nine semester hours. This annual summer institute is designed to provide graduate students and working professionals with an opportunity for in-depth exploration of cutting-edge, clinical issues and topics within the addictions field.

#### HPC 6620-SCHL-BASED CONSULTATION

For school psychologists, counselors and other human service personnel in various fields who deal with parents and/or teachers in a consultative and educational capacity. The course will include a review of consultation models and theories of both a group and triadic nature. It will also provide an opportunity for role play which reflects actual consulting situations. Emphasis will be placed on concerns related to academic deficit, behavioral problems in the school and home, and family stress.

#### HPC 6710-HUMAN SEXUALITY

Classical and contemporary theories of sexual identity and behavior, family planning, reproduction, emotionality, intimacy, and values are studied. Special attention is given to the work of Kinsey, Hooker, and Masters and Johnson, and most recent researchers. Attention is given to futurity, especially as it pertains to current practices and values regarding family planning, general health, sexuality and one's self-esteem. Counseling strategies will be considered pertaining to many currently reported sexual dysfunctions such as impotence, premature ejaculation and lack of sexual response.

#### HPC 6720-GROUP COUNS/THERAPY

Theory and practice of group counseling/therapy, including group process, leadership style, and outcome.

#### HPC 6730-SEXUAL ABUSE COUNSELING

An in-depth examination of the subject of sexual abuse counseling. The course provides an overview of the issues involved in sexual abuse and relates these to the assessment and treatment processes used by counselors and other helping professionals.

#### HPC 6750-COLL STUDENT DEV INSTITU

This annual summer institute is designed to allow college administrators, counselors, instructors, other student development personnel, and graduate students to consider a variety of issues facing students and student development specialists. There is variable content each summer with the theme and topics reflecting current issues and needs. Barring duplication, a student may repeat the course and earn up to a total of nine semester hours.

#### HPC 6770-CURR ISS & SPEC POP ADDIC COUN

Current issues in the addictions field as they impact both counselors and their clients are addressed. Both practical and theoretical orientations of working with addicted clients are discussed. An emphasis is placed in the course on working with rural and minority clients.

#### FDN 5800-HIST OF AMERICAN EDUC

A study of the historical development of education in the United States. Special emphasis is given to educational concepts and practices as they relate to political, social, and cultural development in the growth of a system of public education.

#### FDN 5801-EDUC OF CULT DIVERSE

A general survey of situations encountered by the teacher in a culturally diverse society. An emphasis on the development of the empathetic teacher and the creation of teacher strategies and materials.

#### FDN 5810-EDUC IN APPALACHIAN AMER

A course designed to assist the teacher of mountain children in understanding the pupil and school in the Appalachian culture. Various Appalachian cultural descriptors and their effect on schooling will be discussed with attention to the creation of teaching strategies and materials.

#### FDN 5840-SOC & PHILOS FDNS EDUC

An examination of the philosophical assumptions which appear to influence education policy decisions and an examination of social forces which impact on education - particularly the process we call schooling. Inquiry into significant social and philosophical issues in education is a major component.

#### FDN 5861-HIST POSTSEC EDUC AMER

The study of the development of colleges and universities, community, junior, and technical colleges; and the adult and community education movements. The impact of movement in education, internationally on the development of postsecondary education in America are explored. The study of current issues and problems in postsecondary education is included.

#### FDN 6600-HIST SURV OF READ ED

Provides student with breadth and depth in the evolution of the field of reading. History of the field will be studied along the following subdivisions: 1) sociology of reading, 2) physiology and psychology of reading, and 3) pedagogy of reading.

#### H E 5420-THE COMMUNITY COLLEGE

An analysis of two-year colleges in the United States. Emphases include historical development, mission, student characteristics, teaching and learning, curriculum planning, governance, finance, and current trends. Attention is also given to the role of the community college in serving its community and the values that guide this endeavor.

#### H E 5430-ORG & GOVERNANCE IN HIGHER EDUC

A study of the concepts of organization and administration as applied to post-secondary educational institutions and agencies. Emphasis is placed on understanding organizational structure and the functions of management in educational and agency environments.

#### H E 5440-COLLEGE & UNIVERSITY TEACHING

A study of various theories of instruction with emphasis on the merger of theory and practice in the development of learning strategies for higher education.

#### H E 5630-THE ADULT LEARNER

A study of the characteristics of adults as learners. Special attention is given to review of research on adult learning and to the role of the adult educator as a facilitator in the learning process.

#### H E 5700-LEADERSHIP IN HIGHER EDUCATION

A study of the process of leadership with activities designed to improve skill in planning, decision making, organizing, communicating, and evaluating. Research on leadership and the processes of implementing change will be analyzed.

#### H E 5990-ETHICAL LEGAL ISSUES HIGHER ED

An overview of the law as it affects the administrator in higher education. The accent is on learning general concepts and sources of the law and regulations. Additionally, students select individual problem areas for detailed study.

#### H E 6550-SEM IN COMPARATIVE EDUC

A comparative study of post-compulsory institutions in other countries. Emphasis on the governance, administrative, curricular and instructional issues, concerns, and processes as they relate to the role of post-compulsory institutions. The study of an educational system is done in conjunction with seminars and visitations to educational institutions as well as travel throughout the countries under consideration, when possible.

#### H E 6631-TCHG LRNG POST-SEC EDUC

An in-depth study of learning concepts with implications for instructional models. Special emphasis is given to the process of structuring learning experiences.

#### H E 6650-SEM IN POST-SEC EDUC

To help students integrate their personal and professional development. Particular attention is given to supporting them in developing the capacity to engage in reflective practice and to understand the connections between individual development and organizational development.

#### H E 6861-AMERICAN HIGHER EDUCATION

This course will explore dynamics of American higher education through an examination of governance agencies, regulatory institutions, intergovernmental processes, public policies and socioeconomic issues that impact American higher education. The primary focus is on contemporary higher education in the United States and the culture of Western higher education.

#### ITC 5220-DIGITAL TECHNOLOGIES IN ED

Exploration of the various roles of computers in instructional, service and clinical settings. Students enrolling for two credit hours must register for a one credit hour program area course. Students enrolling for three credit hours continue in ITC 5220 focusing on computer use in a program area.

#### LIB 5170-STORYTELLING

An introduction to storytelling programs; experience in selecting, adapting, and presenting materials from the oral tradition and modern literary sources. Emphasis will be placed on the study of folklore and its adaptations for children.

#### LIB 5180-MULTICULT LIT FOR YOUTH

To introduce the nature of cultural pluralism and prejudice in American Society and to identify its elements in the literature and media for children. Media for children which best exemplifies each ethnic group will be discussed. Criteria for the evaluation of multicultural content in media will be presented. Ways in which to introduce multicultural content in library programs for children will also be examined.

#### LIB 5190-CRIT EVAL LIB M CHILDREN

Focusing on materials for children, students investigate the full range of print and non-print media from perspectives of criticism, bibliographic access, and utilization in public library, school library and classroom settings. To stimulate both instructional and recreational use of media by children, library media programs and services are surveyed and demonstrated.

#### LIB 5200-HIS OF BOOK & LIBRARIES

Survey of the development and forms of books and libraries from ancient times to the present.

#### LSA 5585-TCHR LDRSHP & SCHL IMPROV

This course is designed to help teachers develop an understanding of and skill in assuming leadership roles and responsibilities in their schools. Those aspects of school leadership seen as most appropriate and potentially beneficial for teacher involvement will be emphasized. Particular attention is paid to the relationships among teacher leadership, school improvement, and site-based accountability. Students will have the opportunity to acquire knowledge and skills and formulate their own approaches through both university-based classroom and site-based clinical activities. Activities such as participant-observations, shadow-studies classroom-action research, problem-based learning, case studies, survey research, and qualitative research studies can be included. Students will be expected to present tangible evidence that represents, authentically, their professional growth.

#### LSA 5600-SCHOOL LAW

A study of the fundamental principles underlying the relationship of the state to education and the laws which are applicable to practical problems of school organization and administration.

#### LSA 5800-CRIT INQ THOUGHT ED LDRS

This course is designed as a culminating course for the Master of School Administration program. The course examines current issues and problems that impact school administration. Emphasis is focused on administrative tasks, roles, and functions of educational leaders in schools. The course includes an in-depth review of contemporary trends that change or influence educational administration and governance.

#### LSA 5820-THEORY & DEVEL IN EDUC ORG

The purpose of this course is to inform students in educational leadership of the nature of organizations and ways in which educational organizations maintain themselves. During the course, it will be emphasized that organizational theory and development are eventually about how people grow and develop relationships. The course is designed to bring educational leadership and organizational thinking into a common framework. Students will have the opportunity to examine their own assumptions about organizations, to engage in the study of organizational culture, and to study how organizations form as they do.

#### LSA 5850-POL PUB POL ANALY ED LDRSHP

Designed to give students a comprehensive view of the transformation of educational problems into policy and the bureaucratic duties of public education administrators. Equip educational leaders with knowledge of policy theory, development, implementation and analysis necessary in the management of public educational institutions and agencies.

#### LSA 6400-LEADING CHANGE IN EDUCATION

This seminar course is designed to assist school leaders in the process of leading and managing change in educational organizations. The content is appropriate for any practicing or aspiring educational leader who will face the dynamics of changing educational settings. The course will provide both conceptual and practical models for managing the change process. A primary focus will be placed on educational and instructional leadership.

#### LSA 6491-EDUCATIONAL FACILITIES

Planning the modern school plant, design and nature of functional educational facilities, personnel involvement, maintenance, determining the needs of the community, factors in the selection of sites, architectural and contractual services.

#### LSA 6600-SEM IN LEGAL PROBLEMS

Current legal issues and problems related to organization and administration of public and private educational institutions.

#### LSA 6700-POLICY ANALYSIS ED LEADERSHIP

Politics in Administration will focus on those less obvious processes that accompany the decision-making process. Particular attention will be paid to concepts such as power brokering, interdependence of agencies, and agency politics.

R E 5111-ISSUE TREND PRACT READ

Provides students with an in-depth study of significant issues, trends, and practices in reading at all educational levels. The course is designed to deal with questions and problems of the type facing key teachers, supervisors, and administrators. Because the course is concerned with current trends and issues, it is assumed that the course will undergo periodic changes in terms of what is current.

R E 5671-RES CURR LIT IN READING

Research and critical analyses are made in current periodicals, journals, and recent books on critical areas of reading.

R E 5710-SEM READ LANG ARTS RESRC

Current theory and research in reading and the language arts are examined. Students select a topic in which to pursue in-depth study and then their newly-acquired knowledge is applied to classroom teaching. Emphasis is placed on assisting teachers to be leaders in school settings. This course should be taken at the end of the Master of Arts program.

R E 5715-READ ASSESSMNT & CORRECT

An in-depth examination of informal reading assessment practices and remedial teaching techniques. This course includes practicum experiences in administering and interpreting informal word recognition, contextual reading, and spelling instruments.

R E 5725-PRACT CLIN TCHG OF READ

Provides students with a closely supervised practicum Provides students with a closely supervised practicum

R E 6568-LANG & LINGUISTICS IN RDG

Provides students with a closely supervised practicum from both theoretical and practical perspectives. Students will have the opportunity to learn about cognitive, social, and cultural aspects of language. Emphasis will be placed on understanding psycholinguistic and sociolinguistic perspectives; language acquisition; and components of language, including pragmatics, semantics, syntax, morphology, and phonology. Concepts of oral and written language will be explored within the context of community and classroom discourse and literacy practice.

R E 6575-TECHNOLOGY & LITERACY

This course provides students an opportunity to critically examine the central issues and theoretical perspectives in research on technology and literacy, with an emphasis on critically examining the educational function of communication technology, assisted technology, digital and multimedia text, and educational software. Students will study the nature of technology and literacy, related classroom implementation issues, and specialized use of technology for students with disabilities.

R E 6731-ADV ISSUES LITERACY & LRN

This course provides opportunities for students to investigate current theory and research related to specific literacy topics. The course also engages students in analyzing current literacy programs and practices to identify the theoretical orientation, research base, historical context, and political agendas that inform them. Representative topics include: comprehension, composition, classroom discourse, vocabulary, English language learners, and evolving representations of literacy and text.

R E 7570-ADMN READ LANG ARTS PROG

Provides the theoretical framework administrators need to supervise comprehensive classroom reading and language arts programs. The current research literature will be examined across several areas, including: psychological models of the reading process, reading/writing relationships, academic work, teacher effectiveness, and observation of instruction. This literature will form the basis for examining existing program approaches to teaching reading and language arts in the elementary school and for content area programs in middle and secondary schools. Next, "ideal" program models will be developed, and, finally, methods for implementing, supervising and evaluating programs will be analyzed.

#### R E 7710-READ LANG ARTS FOR ADMIN

This seminar will focus on real world problems that administrators face in planning, implementing, and evaluating reading/language arts programs in public school settings. Discussion of pre-selected problems (with corresponding reading lists) will form the core of the course. Students will be encouraged to focus on specific reading and writing issues and problems in their own school districts.

#### SPE 5030-RSRCH INFORMING PRAC SPEC ED

This course introduces areas of educational research and school improvement. The aim of this class is to develop educators' knowledge and skills in research techniques to use in classrooms. This course covers qualitative, quantitative, and single-subject design research methods, focusing on interpretation and application relating to special education classroom practice. In addition, this course gives students an understanding of how to interpret educational research and how to use it to develop evidence-based interventions in their classrooms. Students develop an action research project that will be implemented in their school/classroom during their internship.

#### SPE 5100-FIELD TR TCH-FAM MODEL

A field oriented course involving supervised implementation of the Teaching-Family Model treatment approach. Evaluations by both consumers and professionals in the field will be utilized as part of the training sequence.

#### SPE 5101-AD FLD TR TCH-FAM MODEL

This field oriented course is offered for those successfully completing the prerequisite field training course. The course is aimed at helping the student refine and modify her/his use of the Teaching-Family Model Treatment program.

#### SPE 5111-ADV DEV ASSMNT PROG EVAL CHLD

This course is designed to provide students with skills and knowledge in assessing the development of children, and the interests, concerns, and priorities of families. Students will collect data for the purpose of monitoring children's progress, family outcomes, and program effectiveness.

#### SPE 5112-ADV DEV C&I FOR YNG CHLDRN

This course is designed to provide students with advanced skills and knowledge in application of a research base to design, adapt and evaluate curriculum and environments suitable for the integration of infants, toddlers, preschool and kindergarten children of various developmental levels and abilities in inclusive settings.

#### SPE 5400-AD RDG ORG ADM COM-B PR

To expand the student's knowledge of the organization and administration of community based programs. Emphasis will be placed on the process of organizing, administering, and implementing treatment programs for troubled youths.

#### SPE 5584-SPECIAL ED LAW & LEADERSHIP

This course introduces the student to educational leadership and examines various leadership and organizational styles. Students will articulate their personal leadership philosophy and vision. The course also examines current research and literature on leadership in schools, educational reform initiatives, and legal issues. The process of IEP writing from both a legal and leadership perspective will be included.

#### SPE 5630-COLLABORATION & ADVOCACY

This course is designed to examine issues and effective practices of collaboration, consultation, and advocacy among families, community service representatives, and professionals.

#### SPE 7121-ORG DES & IMPL SPE ED PR

The critical study of the design and implementation of public school special education programs, with emphasis on present and emerging program models, instructional leadership, legislation, and professionalism.

#### TEC 5000-RESEARCH IN TECHNOLOGY

A comprehensive study of the types, components, methods, and tools of research. Emphasis is placed on promoting an understanding of research design, statistical analysis, searching literature, data collection, and publication of results. The student is required to prepare a proposal for research that will expand knowledge within the field of concentration.

#### TEC 5139-TECHNOLOGY & CULTURE

A study of the complex relationships between culture, society, science and technology through selected readings, seminar discussion, written critiques and conferencing. Examples of these relationships will be taken from historical accounts and from analyses of contemporary societies, both industrial and non-industrial. Emphasis will be on the technical and sociocultural dimensions within the technical areas of energy and the environment, transportation, communication, and production systems.

#### TEC 5604-SUSTAINABLE TRANSPORTATION

This course will introduce students to contemporary trends and issues related to transportation technology. A major focus of the course will be the exploration of emerging new technologies and strategies for producing a sustainable transportation system. Specific topics addressed will include: public transportation strategies, bicycle technology, energy efficient transportation options, and alternative fuels such as biodiesel, alcohol, natural gas, hydrogen and electric vehicles. The environmental, social, and economic, as well as the technological aspects of all options will be explored.

#### TEC 5605-SUSTAINABLE RESOURCE MGT

This course will introduce students to material efficiency issues, recycling, composting and the concept of life cycle design, which is a proactive approach for integrating pollution prevention and resource conservation strategies into the development of more ecologically and economically sustainable product systems.

#### TEC 5606-SUST WATER & WASTEWATER TECH

This course will introduce students to both contemporary and alternative water and wastewater technologies. Students will learn how to analyze the water cycle and be able to develop management concepts which are both economically and environmentally sustainable. Water issues facing the world, sources of water, water purification, water quality assessment, water pumping, efficiency, grey water, composting toilets and "living machines" will all be addressed in the course.

#### TEC 5607-WIND & HYDRO POWER TECHNOL

This course will introduce students to the basic concepts, tools, techniques and materials needed to design and construct systems that convert wind and hydro resources into electricity. Students will have the opportunity to learn how to measure these renewable resources and to estimate the power that could be produced from them. They will also have the opportunity to learn how to design and construct complete renewable electricity systems and become familiar with many contemporary products used in renewable electricity systems. The course will include classroom and "hands-on" design, construction and possibly some field trip experiences outside of class.

#### TEC 5608-PHOTOVOLTAIC SYS DSGN CONSTR

This course will introduce students to the basic concepts, tools, techniques and materials needed to design and construct systems that convert solar resources into electricity with photovoltaic (PV) technologies. Students will have the opportunity to learn how to assess the solar resources available at a particular site and how that information can be used to properly design PV systems. They will also have the opportunity to learn how to design and construct complete code compliant photovoltaic systems and become familiar with contemporary trends and products. The course will include classroom and "hands-on" design, construction and possibly some field trip experiences outside of class. Lecture two hours, laboratory two hours.

#### TEC 5618-SUST BUILD DESIGN & CONSTR

This course will introduce students to sustainability issues related to design energy and material efficient buildings that get the majority of their power from the sun. The course will explore a variety of alternative building materials and techniques such as straw bale, adobe, log post and beam, stress skin panel and geodesics. Other topics to be discussed will include site selection, sustainable community design, water conservation, and composting and recycling systems, waste reduction and indoor air quality problems and solutions.

#### TEC 5628-SOLAR THERMAL ENERGY TECH

This course will introduce students to the basic concepts, tools, materials and techniques needed to convert solar energy into heat. Specific technologies to be studied include solar cookers, solar dryers, solar water heaters, solar water pasteurization/distillation, solar greenhouses/coldframes, and some house heating systems. Students will develop skills in the use of tools, materials, and processes which effectively and efficiently capture and convert the sun's energy into thermal energy. The course will include traditional classroom and "hands on" design, construction and testing activities.

#### TEC 5638-CONTEMP PROB APPROP TECH

This course is designed to provide students with an overview of contemporary problems facing the Appropriate Technology movement such as affordable and efficient alternative energy systems, small scale production systems, waste management and recycling, bioregional development, community and shelter design and technology transfer methodology. Each student will have the opportunity to explore in-depth a problem of their choosing and will be given guidance in the identification, definition and analysis of their chosen problem. Both library research and prototype or model construction will be required.

#### TEC 5700-BIOFUELS TECHNOLOGY



An examination of evolving biofuel technologies such as biodiesel, alcohol, cellulose products, and methane which are being developed to displace depleting fossil fuels (diesel, gasoline, natural gas, and coal). This course will introduce students to the basic concepts, tools, techniques, and materials needed to assess, design, and construct biofuels technology systems. Coursework will include multimedia presentations, lectures, discussions, films, field trips, homework, guest-speakers, and laboratory activities. Topics include: internal combustion engine technology, biodiesel chemistry and physical properties, combined heat-power systems, materials compatibility, by-products, closed-loop designs, energy balance, life cycle assessment, ASTM specifications, fuel analysis, feedstocks, biofuels and agriculture, biofuels in developing countries, ethanol, cellulosic ethanol, biogas and landfill gas, and eco-industrial models.

#### TEC 5708-BUILDING SCIENCE

This course introduces students to the complex ways in which buildings actually interact with their environment. Particular issues include how moisture problems occur, how to protect building occupants from poor health due to indoor air quality, how to prevent building durability problems, and how to provide more energy efficient and comfortable buildings for clients. The course shows students how to use diagnostic equipment, such as blower doors, duct leakage testing devices, indoor air quality measurement devices, and air flow detection equipment. The course also emphasizes translating technical materials into concise written reports, as well as comprehensive written reports. Graduate students will be required to conduct additional research on their course project and have additional assignments of building science diagnostic testing.

#### TEC 5711-CMPTR MODEL RENEWABLE EN SYST

This course will be an in-depth investigation of a variety of software packages for modeling the performance of renewable energy systems. Software packages may include Excel, SAS, FChart, PVFChart, BLCC, HOMER, WindCAD, RETScreen, and ARCReader. Students will use these programs to predict the performance of a variety of solar heating technologies, photovoltaics, wind turbines, and solar house designs. The economics and environmental benefits of renewable energy systems will also be explored. File formats and memory allocation schemes, as they relate to understanding data storage, will be discussed. Effective problem solving skills will be emphasized throughout the course.

#### TEC 5718-CONSTRUCTION MANAGEMENT

This course will introduce students to the mechanics of starting and managing a construction business. Organizational structures, required licenses, taxes, codes, permits, advertising, personnel management, customer relations, scheduling, accounting, insurance and financing will be addressed. Special attention will be given to the use of computer software, such as spreadsheets and scheduling programs, for construction management activities. Students will study construction management and personnel issues and will include budgeting and cash flow analysis using computer software for their final project.

#### TEC 5728-COMMERCIAL BLDG DESIGN

This is an advanced level course exploring the broad field of architectural building design. It investigates the details of buildings, from structural elements to decorative components. Students have the opportunity to learn a variety of design development techniques, including manual drafting, sketching and rendering, computer-aided drafting and design (CADD), and model building. Required course projects include a full set of construction drawings for a commercial building using CADD software, as well as a rendering and model of the building. Students will also research and prepare a detailed report on a historical or current topic in architecture.

#### TEC 5758-PLANNING AND SCHEDULING

This course covers planning and scheduling, estimating resources, value engineering, project meetings, and personnel management for construction projects. Special attention will be given to the use of computer software (such as spreadsheets and scheduling programs) for construction management activities. The course also involves research on different scheduling software packages available commercially.

TEC 5809-RSRCH & DEVEL IN TECH AR

In this course, students will be required to design and carry out an original research project, including data collection and analysis and preparation of a research report for publication consideration.

E S 5555-ADV NUTRTNL ASPECTS EXR SPORT

A study of nutrition specific to physical activity and sport performance. Topics will include metabolism during exercise, sport-related weight gain and loss, food and fluid intake for competition, nutritional ergogenic aids, exercise recovery nutrition, and various special topics.

S W 4999-EXPERIENTIAL LEARNING

S W 5005-AM SOC WELFARE HIS & SW PROF

This course is an introduction to MSW level professional Social Work. It provides a comprehensive overview of the social, political and economic contexts that led to the emergence of the profession of Social Work, service delivery systems and related policies, and professional ethics and values.

S W 5010-HUMAN BEHAV & SOC ENVIR I

This is the first of two courses in the MSW foundation year that provide knowledge for understanding and assessing human behavior and interaction in varied social, cultural, and economic contexts as a necessary foundation for effective social work practice. The course will examine bio-psycho-social development from birth through early adolescence, utilizing ecological systems and life span/life course perspectives.

S W 5030-FDNS OF SOCIAL WORK RESEARCH

Examines processes of theory building and a variety of scientific methods that provide the foundation for research in social work settings. Students will have the opportunity to learn about elements in social work research that include social work ethics, problem formulation, research design, data analysis and reporting, and utilization of research in social work venues.

S W 5040-FLD PRACTICUM & SEMINAR I

Supervised placement in a human service agency provides the student the opportunity to apply in a practicum setting material learned in the other MSW foundation courses. The practicum will include micro, mezzo, and macro levels of practice. The seminar will provide the student opportunities to explore field-based practice, policy issues, and theories. Students will complete 240 hours in the practicum. Graded on an S/U basis.

S W 5200-SOC WELFARE PLCY ANLYS PRAC

This course provides an in-depth knowledge of social welfare policies, including exploration of social problems, assessment of policy alternatives, analysis of policy implementation, prioritization of revisions, and introduction to strategies for policy change. Students will develop a comprehensive understanding of the impact of policies on varied client populations.

S W 5210-HUM BEHAV & SOCIAL ENVIR II

This is the second of two human behavior courses in the MSW foundation year that provide a basis for effective social work practice. This course examines bio-psycho-social development from late adolescence through the late adulthood, utilizing ecological systems and life span/life course perspectives. The influence of macro systems on human development and behavior will be addressed.

S W 5220-PRAC W/GROUPS & COMMUNITIES

The course uses the knowledge and skills of social work and builds on this foundation to include groups and community practice. Knowledge of theories, models and interventions for group and community practice that are learned in the class are integrated and applied in the concurrent student field internship.

#### S W 5230-EVAL PROF SOCIAL WORK PRACT

This course is designed to provide students with the fundamental knowledge and skills to conduct planned evaluations of social work practice with varied client populations at the micro- and macro- levels.

#### S W 5240-FLD PRACTICUM & SEMINAR II

Supervised placement in a human service agency provides the student the opportunity to apply in a practicum setting material learned in the other MSW foundation courses. The practicum will include micro, mezzo, and macro levels of practice. The seminar will provide the student opportunities to explore field-based practice, policy issues, and theories.

#### S W 5720-INDIV FAM FLD PRACT & SEM I

The field practicum consists of an agency experience that offers opportunities for advanced practice with children, adults, and families. Students will demonstrate advanced skills in assessment, intervention, and practice with children and adults using an ecological-systems and strengths-based perspective. The seminar will provide an opportunity for students to examine their practice and the influences of theory and policy on practice. Students will complete 240 hours in the practicum.

#### S W 5750-INDIV & FAM FLD PRAC & SEM II

The field practicum consists of an agency experience that offers opportunities for advanced practice with children, adults, and families. Students will demonstrate advanced skills in assessment, intervention, and practice with children and adults using an ecological-systems and strengths-based perspective. The seminar will provide an opportunity for students to examine their practice and the influences of theory and policy on practice. Students will complete 240 hours in the practicum.

#### S W 5810-ADV COMMUNITY SOC WORK PRACT

This advanced course focuses on the social work principles of empowerment and social change as they apply to communities. Building upon the foundation introduction to macro community practice and related theories, students will gain a more detailed knowledge of the skills and strategies needed to engage effectively in community organizing, development and planning. Consistent with social work's focus on oppressed and disenfranchised populations, students will explore the concept of community diversity, moving beyond the concept of race/ethnicity. Students will also gain advanced skills in the use of various community assessments.

#### S W 5820-SOC WELFARE ORGANIZAT MGT

Examines the social work professional issues and trends that influence planning and managing human service organizations, including organizational theories and conflict management.

#### S W 5830-COMM ORG PRAC FLD PRA & SEM I

The field practicum consists of an agency/organization experience that offers opportunities relative to community and organizational practice. Building on the skills and knowledge learned in the MSW foundation year, students will demonstrate advanced skills in working in the areas of community practice, nonprofit and public administration, and organizational management. The seminar will provide an opportunity for students to examine their practice and the influences of theory and policies on practice. Students will complete 240 hours in the practicum.

#### S W 5840-NONPROF & PUB HUM SERV ADMIN

This course provides students with the knowledge and skills to become effective leaders within nonprofit and public human service organizations. Students will have the opportunity to learn about key organizational issues such as organizational goals and objectives, strategic planning, personnel and Board management, fundraising, proposal writing, and budget development and oversight.

#### S W 5850-COMM & ORGANIZATIONAL CULT

This advanced course in the Communities and Organizational Management concentration under the MSW degree builds on the theories of community from SW 5220 and SW 5810, and management skills and organizational theories from SW 5820. Students will develop the skills needed to critically analyze the nuances of organizational and community cultures from a social work perspective. Students will also gain advanced skill in applying social work concepts such as empowerment and social justice to their analysis. Finally, students will be exposed to a variety of tools for examining organizational and community culture and will explore social work interventions to form, maintain, change and manage organizational community cultures.

#### S W 5860-COMM ORG PRAC FLD PRA SEM II

The field practicum consists of an agency/organization experience that offers opportunities relative to community and organizational practice. Building on the skills and knowledge learned in the MSW foundation year, students will demonstrate advanced skills in working in the areas of community practice, nonprofit and public administration, and organizational management. The seminar will provide an opportunity for students to examine their practice and the influences of theory and policies on practice. Students will complete 240 hours in the practicum.

#### MUS 5051-ADV TOPICS IN MUSIC THERAPY

Investigation and examination of current trends, especially those related to advanced clinical practice in music therapy, including client assessment through music experiences and innovative treatment methods.

#### MUS 5200-MUSIC THERAPY LAB

Music improvisation-based laboratory designed to provide direct experiences as a participant in a music therapy group.

#### MUS 5900-ADV MUSIC THERAPY PRACT

In-depth clinical experience designed to broaden clinical skills or provide opportunity for application of advanced music therapy methods.

