

ACCT110 Financial Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study and appreciation of the process of financial reporting for business organizations including the preparation of financial statements. Primary emphasis is on accounting concepts with an exposure to procedural techniques to give students a basic knowledge of the accounting process. The course is designed for users of accounting information.

Prerequisite: None

Corequisite: None

ACCT115 Management Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the use of accounting data internally within a firm by managers in both manufacturing and non-manufacturing businesses. The course teaches students to use accounting data for planning, controlling and making decisions concerning the optimum allocation of the firm's financial resources. By completing ACCT110 and ACCT115, the student is provided a complete survey of the concepts and tools used by accountants.

Prerequisite: (ACCT110)

Corequisite: None

ACCT200 Effective Writing for Accounting and Finance

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Acquaints students with the types of professional writing prevalent in Accounting and Finance, including communication of financial and managerial accounting information and information related to audit and tax engagements. The primary emphasis is on preparing students to write proposals and reports appropriate to the accounting and financial environment.

Prerequisite: (ACCT115 AND CISC150 AND ENGL100)

Corequisite: None

ACCT210 Intro Federal Income Tax

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course introduces students to the federal income tax system, based on the Internal Revenue Code, its regulations and interpretations. Emphasis is on the concepts of tax planning and compliance for business decision-making, and secondarily, for use in individual financial planning. The course is required for Accounting majors, and it is a major elective for Management majors and in the Associate in Applied Science in Management program.

Prerequisite: (ACCT110)

Corequisite: None

ACCT215 Accounting Information Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of modern concepts of accounting information systems including accounting systems design for organizations of differing character and complexity. Manual and automated accounting systems are reviewed including the transition from manual to automated accounting systems. Designing internal controls and auditing of computerized systems are reviewed.

Prerequisite: (ACCT115 AND CISC150)

Corequisite: None

ACCT300 Cost Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An in-depth study of the basic principles and procedures of cost accounting that are most often found in use by typical manufacturing and service organizations. The cost accounting cycle is studied in a step-by-step approach to the flow of costs. Emphasis is on estimating, planning and controlling costs.

Prerequisite: (ACCT115)

Corequisite: None

ACCT328 Accounting Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

ACCT333 Accounting for Governmental and Other Nonprofit Entities

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the principles and standards used in not-for-profit accounting, as applied to governmental entities, health care organizations, colleges and universities, and all other non-profit organizations.

Prerequisite: (ACCT115)

Corequisite: None

ACCT335 Intermediate Accounting 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Acquaints students with the theoretical foundation of generally accepted accounting principles for financial reporting and how those principles apply to a firm's asset, liability, and owners' equity accounts. Asset accounts are examined in depth.

Prerequisite: (ACCT110)

Corequisite: None

ACCT410 Advanced Topics in Financial Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course develops topics stressing the relationship between specialized accounting functions and their impact on the financial statements of business organizations.

Prerequisite: None

Corequisite: None

ACCT420 Auditing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the standards and procedures underlying auditing. Emphasizes current auditing practices within the public accounting profession and operational auditing practices. Stresses risk analysis. Includes statistical sampling techniques.

Prerequisite: (ACCT335 AND MATH107) OR (MATH312)

Corequisite: None

ACCT435 International Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on how and why accounting principles differ among countries, and also on financial and accounting issues facing a United States-based enterprise, which operates in international business. Includes international auditing and taxation, as well as currency transaction and translation issues, and preparation of consolidated financial statements.

Prerequisite: None

Corequisite: None

ACCT450 Advanced Topics in Managerial Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to supplement and integrate Cost Accounting, Intermediate Accounting, and Management: Concepts and Strategies. Course approach emphasizes strategic cost management and the impact of managerial accounting information on employees' behavior within a company.

Prerequisite: (ACCT300 AND MATH107)

Corequisite: None

ACCT460 Advanced Federal Taxation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the concepts of corporate, partnership, estate, and trust taxation. Emphasis is placed on tax theory and application, but also includes projects in tax research. The students will gain an understanding of taxation for C and S corporations, as well as the fundamental theories concerning estate and trust taxation. In addition, students will apply that theory in the preparation of Forms 1120, 1120S, 1065, 1041, and 706.

Prerequisite: (ACCT210)

Corequisite: None

ADAC100 Learning Strategies for College

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to develop the learning styles, attitudes, and behavior of students with special academic needs. The students will be instructed in listening skills, note taking, textbook reading, preparation for tests, use of time, solving problems, organizing study, critical and creative thinking for studying, and methods for converting short-term memory to long-term memory.

Prerequisite: None

Corequisite: None

ADAC101 Introduction to Academic and Personal Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the evolution and purposes of American higher education and the value of general education requirements. Explores the psychosocial development of college students with a focus on self-awareness along multiple domains including academic skills, interpersonal relationships, career interests, and technological and communication skills. Acquaints students with university resources, diversity issues, and the connection between student learning styles and college success.

Prerequisite: None

Corequisite: None

ADAC105 Principles & Development of Cognitive Reading Processes

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

College students will learn strategies and techniques to enhance their abilities to learn from written materials, including both expository and narrative texts and professional journals. The development of students' cognitive reading processes will be emphasized. This includes stressing methods pertaining to activating, schema, predicting, anticipating, searching, verifying, organizing, remembering and elaborating. Students will learn to apply metacognitive monitoring and self-correction strategies. Vocabulary development skills will also be emphasized, including the effective use of graphophonic, syntactic, semantic, and structural cues to identify unknown words.

Prerequisite: None

Corequisite: None

ADAC119 First Year Student Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to the culture and mission of the university and its programs of study. Explores the purpose of one's college education and provides students an opportunity to become engaged with an academic discipline of interest. Through class discussions of readings and activities, students are engaged in active learning and the development of effective college study skills. Co-curricular activities and a peer mentor component facilitate connections with fellow students and faculty in the university community. Restricted to first semester, first year students Exploratory Studies students.

Prerequisite: None

Corequisite: None

ADAC200 Foundations of Group Peer Tutoring

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An overview of the mission, operation, and philosophy of Lock Haven University Tutorial Services. Students will be acquainted with the critical issues encountered in tutoring including, but not limited to, legal, multicultural, pedagogical, learning skills, learning styles, teaching styles and communication.

Prerequisite: None

Corequisite: None

ALTE300 Helping Skills in Alternative Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to working with at-risk youth in alternative education settings. The course is designed to prepare future educators and others for work in alternative education settings by introducing the scope and purpose of alternative education, the characteristics and dynamics of at-risk conditions for youth, and by providing opportunities to develop basic helping skills. Students will learn basic helping skills necessary for effective intervention with at-risk students including helping communication, referral/case-management, conflict management, interviewing and assessment. Approximately one-half of the course is designed to examine at-risk youth issues and the programmatic considerations related to those issues and one-half of the course is devoted to examining alternative

education settings and the development of helping skills appropriate to working in those settings. Restricted to Elementary and Special Education majors with a minimum of 60 credit hours; others by permission.

Prerequisite: None

Corequisite: None

ALTE480 Alternative Education Practicum

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The capstone course for the Alternative Education minor. It includes four weeks of classroom-only experience and eleven weeks in a placement at an alternative education program site. The four weeks of classroom experience emphasize alternative education theory and skills development. The eleven-week placement allows students to participate in a supervised participation experience, emphasizing practical application of alternative education classroom interventions.

Prerequisite: (ALTE300)

Corequisite: None

ALTE600 Introduction: Inquiry and Educational Change

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the Master of Education in Teaching and Learning and Alternative Education. In this course graduate students will be introduced to the program expectations, tools and objectives including the technologies utilized for program delivery and electronic portfolio development, online learning strategies, the National Board for Professional Teaching Standards, the National Educational Technology Standards for Teachers, and educational research.

Prerequisite: None

Corequisite: None

ALTE604 Designing Assessments Using Performance Standards

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to provide graduate students an understanding of and practice with the design and analysis of assessments and rubrics that can be employed in a standards-based classroom. Readings and activities are grounded in educational research and illustrated with meaningful classroom practices of teaching and learning in a standards-based environment.

Prerequisite: None

Corequisite: None

ALTE607 Projects, Readings and Case Studies in Alternative Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Concentration on a project, readings, or reflective practice case studies in alternative education. Students choose from the following: (1) identify a curriculum, instruction, staff development, classroom management or leadership problem and design a plan or project to investigate that problem; (2) summarize and analyze scholarly writings in curriculum, instruction, classroom management, leadership, and other related areas in alternative education; (3) identify a curriculum, instruction, classroom management, leadership issue, and then plan and construct an inquiry regarding the issue.

Prerequisite: None

Corequisite: None

ALTE608 Education Reform

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth look at efforts to reform the education system in the United States. The course includes a historical overview of American education during the past 100 years; an analysis of reform efforts; contributions by various cultures, inside and outside of the United States to reform efforts; an overview of the process of reform; and, an exploration of current reform initiatives.

Prerequisite: None

Corequisite: None

ALTE609 Classroom Management and Control

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to promote student mastery of theory and practice related to classroom management. Students develop a repertoire of strategies to use for preventing and managing classroom discipline with all types of students and situations.

Prerequisite: None

Corequisite: None

ALTE610 Helping Skills in Alternative Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to working with at-risk youth in alternative education settings. The course is designed to prepare educators and others for work in alternative education settings by reviewing the characteristics and dynamics of at-risk conditions for youth and by providing opportunities to develop basic helping skills. Approximately 1/3 of the course is designed to examine at-risk youth issues, establishing appropriate conditions for helping, and the programmatic considerations in Alternative Education. Two-thirds of the course is devoted to examining various alternative education settings and the development of helping skills appropriate to working in those settings. Students will learn basic helping skills necessary for effective intervention with at-risk students including helping communication, referral/case-management, conflict management, handling crises, and interviewing. Additional helping strategies including resilience education, social skills training, and community interventions are also introduced.

Prerequisite: None

Corequisite: None

ALTE612 Number and Number Systems and Pedagogy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Utilizes the five core propositions of the National Board for Professional Teaching Standards and the associated discipline/grade level standards as a framework. Graduate students will utilize best practice in mathematical pedagogy and collaborate with other teachers to plan, teach and revise lesson plans in a format that follows Lesson Study research.

Prerequisite: None

Corequisite: None

ALTE615 Alternative Education: An Introduction to Theory and Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to be an introduction to theories and practices in Alternative Education. An array of topics is explored to bring research, theories and practices together in a meaningful format. The inquiry nature of this course will serve as a building block for issues in other courses and the capstone research project. Emphasis is placed upon the practical application of theories in the classroom, best practices and characteristics of effective programs.

Prerequisite: None

Corequisite: None

ALTE616 Curriculum Issues in Alternative Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to curriculum issues in alternative education settings. This course is designed to empower educators to facilitate a framework for instructional design in the classroom. Educational research proves that there are best practices that can be used to empower teachers to align curriculum, instruction, and assessment to the State and National Standards. Educators will be able to prepare environments that will promote success for at-risk students, by utilizing differentiated instructional and management techniques.

Prerequisite: None

Corequisite: None

ALTE617 Grant Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the process of writing grants in human services and education. Students will explore and analyze the various components of a grant, the process of developing and writing proposals, research techniques that produce results, the budgeting process, and how to develop a unified proposal. Students will write a grant proposal as a final product for the course.

Prerequisite: None

Corequisite: None

ALTE618 Understanding the Role of Cognition and Social Skills in the Classroom

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to promote student mastery of theory and practice related to cognitive and social skills training. Specifically, students will explore brain-based learning, cognitive skills research, social skills research, and the practical uses of these concepts with students in the classroom.

Prerequisite: None

Corequisite: None

ALTE625 Investigating Curriculum Issues in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Students may select one issue from the following: curriculum mapping, designing assessment using performance standards, differentiated instruction, brain-based learning. In the alternative, they may propose another issue for instructor approval. Through investigation, analyzation, and discussion, students investigate and formulate criteria necessary for the implementation of best practices within the classroom. (ALTE625 does not supplant ALTE616.)

Prerequisite: None

Corequisite: None

ALTE645 Topics in Urban Education

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An intensive approach to urban education issues and practices designed to explore specialized knowledge and skill pertinent to the field of education. Topics may include, among others, equity and diversity in the classroom, multi-ability classroom practices, urban curriculum issues, urban minority families and communities, and other relevant federal legislations, classroom management, and poverty. Emphasis is placed on written work and discussion.

Prerequisite: None

Corequisite: None

ALTE648 Topics in Alternative Education

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An intensive approach to alternative education issues and practices designed to explore specialized knowledge and skill pertinent to the field of education. Topics may include, among others, correctional education, school and/or educational reform, charter schools, specialized alternative learning environments, residential settings, and urban education.

Prerequisite: None

Corequisite: None

ALTE692 Reflective Practice and Action Research 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: None

Corequisite: None

ALTE695 Advanced Field Experience

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The culminating course in the M.Ed. graduate program that allows the graduate student to apply knowledge and demonstrate skills gained in their professions. This course is restricted to graduate students and is a core requirement in the M.Ed. Teaching and Learning and Alternative Education programs.

Prerequisite: None

Corequisite: None

ANTH101 Intro Anthropology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the biological and cultural evolution of man based upon information developed in physical anthropology and archeology; an introductory examination of various social institutions from a cross-cultural perspective. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None

Corequisite: None

ANTH102 Cultural Anthropology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course seeks to explore the diversity of human behavior in such areas as social organization, politics, economics and religion. As well as exploring the diversity of human behavior, the class will seek to understand and explain this behavior. A goal of this course is to have students view new patterns of living using the principle of cultural relativism. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None
Corequisite: None

ANTH323 Cultures North American Indians

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of traditional native American culture and the process by which the various indigenous cultures are currently merging into a pan-Indian awareness. (Fulfills multicultural general education)

Prerequisite: None
Corequisite: None

ANTH328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation of the status of men and women in hunting and gathering, horticultural, agricultural, developing and industrial societies. Through this investigation we will discover the factors heading to sexual equality and inequality and make some assessments about the status of women in our society using a comparative perspective. (Fulfills multicultural general education)

Prerequisite: None
Corequisite: None

ANTH330 Japanese Culture and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Sociological and anthropological perspectives are used to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan. See also SOCI330.

Prerequisite: (SOCI101) OR (ANTH102) OR (ANTH101)
Corequisite: None

ANTH422 Anthropology Latin America

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of indigenous cultures of Central and South America as constructed from archaeological, ethnographic and historical data. Ethnographic information on contemporary peasants, Indians, and urban residents and analysis of current events from an anthropological point of view will also be presented. (Fulfills multicultural general education)

Prerequisite: (ANTH101) OR (ANTH102)
Corequisite: None

ANTH424 Anthropology of the Middle East

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the political, economic, religious and kinship systems of Middle Eastern peasants, pastoralists and townsmen. Contemporary issues such as the rise of Islamic Fundamentalism, Arab-Israeli relations, oil wealth, labor migration and development will also be examined from an anthropological perspective.

Prerequisite: (ANTH101) OR (ANTH102) OR (SOCI101)
Corequisite: None

ANTH622 Anthropology of Latin America

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of indigenous cultures of Central and South America as constructed from archaeological, ethnographic and historical data. Ethnographic information on contemporary peasants, Indians, and urban residents and analysis of current events from an anthropological point of view will also be presented.

Prerequisite: None
Corequisite: None

ANTH628 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will investigate the status of men and women in hunting and gathering, horticultural, agricultural, developing and industrial societies. Through this investigation we will discover the factors heading to sexual equality and inequality and make some assessments about the status of women in our society using a comparative perspective.

Prerequisite: None

Corequisite: None

ANTH630 Japanese Culture and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course will use sociological and anthropological perspectives to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan.

Prerequisite: None

Corequisite: None

ART100 Understanding Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the world of art both past and present. Explores the essential ideas of art and examines them in concrete form using examples from diverse times and cultures. Stresses understanding art as a universal human creative impulse by studying its forms in a variety of aesthetic and cultural contexts.

Prerequisite: None

Corequisite: None

ART102 Art Fundamentals

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the basic principles which govern all art forms and an exploration of the art elements which allow these principles to be applied. The emphasis will be on the development of visual thinking and the ability to respond to art as well as to natural and manmade environments. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART103 Introduction to Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of art history that serves as an introduction to aesthetics, perception, art criticism, and the art heritage of humankind. It is designed to help students develop appreciation and understanding of the visual arts. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART105 Introduction Three-Dimensional Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The course is an introduction to the basic understanding of the elements of composition and principles of design in the three-dimensional arts. The student will acquire this knowledge by executing a series of studio projects intended to simulate visual problem-solving. The course will examine the practical application of basic concepts of design in the plastic arts by exposure to masterworks through slide presentations and museum field trips. The student will engage in aesthetic exercises which primarily focus on the fundamental principles of three-dimensional design rather than the exploration of the subjective, creative-process. This course will satisfy the Art requirement for General Education.

Prerequisite: None

Corequisite: None

ART110 Color & Two-Dimensional Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A development of judgment and creativity in solving problems of abstract and decorative design with the use of color. Students will be introduced to computer graphics.

Prerequisite: None

Corequisite: None

ART112 Drawing 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A beginning exploration of drawing practices, materials and concepts concentrating on perspective, still life, landscape and portrait. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART200 Visual Thinking

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of idea development as it applies to the graphic communicator. A variety of idea generating techniques are explored with a strong emphasis upon quick visual exercises to stimulate innovative thinking and collaborative visual problem solving. Does not meet General Education requirements.

Prerequisite: None

Corequisite: None

ART217 Introduction to Electronic Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to electronic and digital means of producing artworks utilizing primarily computer based technology. Students create electronically generated images and are required to solve specific design problems.

Prerequisite: (ART110) OR (ART212) OR (ART112)

Corequisite: None

ART221 Typography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to typography: the art of designing with type, including the planning of typeface, size, composition, and page layout. This course explores the fundamental principles of typography and its integral role in graphic design.

Prerequisite: (ART110)

Corequisite: None

ART227 History of Graphic Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of the history of design concentrating on visual communication and typography from prehistory to the digital revolution.

Prerequisite: (ART103) OR (ART105) OR (ART110)

Corequisite: None

ART230 Introduction to Computerized Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to basic design elements and the computer skills necessary to implement them. Computer design and multi-media programs will be introduced and their application explored. Does not fulfill General Education requirements.

Prerequisite: None

Corequisite: None

ART300 Arts and Crafts

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expose the student to a wide-range of fine applied crafts, featuring a variety of experiences utilizing various media and techniques. Students will be encouraged to develop and express creative ideas in their work, as well as be expected to broaden their ideas through research of designs from various sources. The practical application of the theoretical knowledge and understanding of the fundamental elements principles of design will be emphasized.

Prerequisite: None
Corequisite: None

ART301 Renaissance and Baroque Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Art historical survey that covers the architecture, sculpture and painting in Italy, Flanders, Holland, England, and Spain from the fifteenth through the seventeenth centuries. Fulfills General Education Requirements. Recommend ART103 or ART304 prior to enrolling.

Prerequisite: None
Corequisite: None

ART302 Art for Early Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An emphasis on art and art education for children between the pre-kindergarten and third grades. Students become familiar with the philosophy and theories of art education, curriculum planning, and teaching/learning strategies for young children. Various art activities will provide hands-on experience. ART302 is open only to students with a declared major in Early Childhood and a minimum number of 32 sh.

Prerequisite: None
Corequisite: None

ART304 Ancient & Medieval Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of the history of art from Paleolithic times through the Gothic period. Art objects will be studied as reflections of changing cultural priorities that coincide with historic developments in Western Civilization. Fulfills General Education Requirements.

Prerequisite: (ART103)
Corequisite: None

ART305 Pottery

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the methods of forming pottery from primitive to contemporary techniques. Explores various types of decorating, glazing, and firing. Fulfills General Education Requirements.

Prerequisite: None
Corequisite: None

ART307 Asian Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the visual arts in Asia (India, China and Japan) from prehistoric through the eighteenth century (pre-modern period). Emphasis will be on tracing major artistic developments and achievements in each region.

Prerequisite: None
Corequisite: None

ART308 On-line Interactive Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A studio course that explores concepts and structures of on-line communication employing interactive digital media. A variety of World Wide Web authoring tools and procedures are introduced.

Prerequisite: (ART217) OR (ART110)
Corequisite: None

ART309 Fabrics and Fibers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Based upon contemporary design techniques for textiles that had their origin in other cultures. Students will engage in a wide range of fiber arts experiences, featuring a variety of media and techniques.

Prerequisite: None

Corequisite: None

ART312 Drawing 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expand the students conception of drawing subjects, techniques, and materials. An appreciation and study of drawings by major artists is also included. Fulfills General Education Requirements

Prerequisite: (ART212) OR (ART112)

Corequisite: None

ART315 Ceramics: Techniques in Hand- building and Tile Construction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A studio intensive exploration of various hand-building and tile construction techniques. The hand-built construction techniques investigated will be slab, drape, coil, additive, and reductive methods. The tile-making component of this course will emphasize various traditional and nontraditional mosaic tile construction methods. Bas, mezzo, and alto relief tile construction will be explored by creating plaster press and stamp molds of student generated relief tiles. Fulfills General Education Requirements

Prerequisite: None

Corequisite: None

ART325 Printmaking

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An exploration of various traditional and contemporary printmaking techniques. Media include linoleum, woodcut, wood engraving, copper and zinc etching and engraving. Fulfills General Education Requirements.

Prerequisite: (ART110 AND ART112) OR (ART110 AND ART212)

Corequisite: None

ART328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In-depth exploration of a selected topic in art. Students engage in research and participate in intensive discussions. Emphasis will be on gaining critical understanding of works of art through contextualization and study of various issues related to a given genre or social/historical context.

Prerequisite: None

Corequisite: None

ART330 Painting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of various painting materials, techniques, and styles of painting. Stress is placed on development of a creative, personal style. Paintings from the mid-1800s to the present serve as course models. Media may include watercolor, oil and acrylic paint. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART335 Sculpture & Three-Dimensional Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to three-dimensional design and sculpture with an examination of many sculptural techniques, both ancient and modern. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART342 Print Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to processes and problems in print design. This course specifically builds upon skills developed in ART221 Typography.

Prerequisite: (ART217 AND ART221)

Corequisite: None

ART345 Metals - Surface and Form Manipulation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce students to a variety of surface decorations using texture and color, as well as to provide opportunities for students to explore numerous ways of manipulating metal into three-dimensional forms. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART350 Photography 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Beginning exploration of photographic processes and materials. The course attempts to take the subject matter beyond its stage of literalness to a more expressive and stylistic approach in content and technique. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART355 Life Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration and study of the anatomy and expressive qualities of the human form through drawing.

Prerequisite: (ART312)

Corequisite: None

ART390 Video Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to digital video as an expressive art medium including filming, nonlinear editing, audio and post-production techniques.

Prerequisite: (ART217)

Corequisite: None

ART401 History of Modern Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Modern art from 1800 to 1990. Emphasis on relating concepts of modern art to the philosophy underlying development of various 19th and early 20th century art styles. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART411 Interactive Animation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Exploration of computer based animation and drawing techniques utilizing a vector-based animation program such as Macromedia Flash.

Prerequisite: (ART212 AND ART217) OR (ART112 AND ART217)

Corequisite: None

ART420 Art Since 1950

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of art since 1950. Emphasis is placed on the study of artistic movements emerging in reaction to Modernism and the impact of critical theory on late twentieth and early twenty-first century art.

Prerequisite: (ART103 AND ART401)

Corequisite: None

ART425 Special Problems

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4 sh]

Topics available from any studio course after having completed the basic course and gained permission from department. Makes possible individual study, creative work or research under the direct guidance of the art staff. May be taken for 1 to 3 credits more than one time to provide options for in-depth study within a specified area. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ART440 Aesthetics, Portfolios and Exhibitions

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is taught in three units. The first covers the aesthetics from a wide range of studio disciplines. The second focuses on methods for creating portfolios for professional presentation. The third deals with exhibition preparation and gallery and museum practices. Emphasis is placed on hands on experience and development of career enhancing skills for art majors.

Prerequisite: None

Corequisite: None

ART490 Senior Capstone

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Students engage in an intensive project related to their major concentration which will culminate in an exhibition or presentation. Emphasis will be on gaining critical understanding of their work through articulation of goals, active critique, and self-assessment.

Prerequisite: (ART440)

Corequisite: None

ART600 Renaissance and Baroque Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the architecture, sculpture and painting in Italy, Flanders, Holland, Germany, England, and Spain, with an emphasis on the general characteristics of the Renaissance.

Prerequisite: None

Corequisite: None

ART609 History of Modern Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Modern art from 1800-1940. Emphasis is placed on the development of concepts relating to modern art and the philosophy underlying the development of various styles of art in the Nineteenth and early Twentieth Centuries.

Prerequisite: None

Corequisite: None

ART628 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The chief purpose of this seminar is to explore the role of the fine arts in contemporary society and in the life of the individual. Students will be required to attend all cultural events on campus (i.e., concerts, plays, art exhibits, etc.). These events will be the basis for discussion, and brief review papers of all these events will be required. Field trips to Bucknell University, Lycoming College, and The Pennsylvania State University may be planned. When possible a trip to Washington, D.C., or New York City will be scheduled.

Prerequisite: None

Corequisite: None

ART630 American Art: Unity in Diversity

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An historical survey of American art covering prehistoric through modern eras. In addition to the American core culture, it includes typical contributions of minorities, such as American Indians, African Americans, Hispanic Americans, and women artists of all ethnic groups.

Prerequisite: None

Corequisite: None

ART640 Jewelry 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An overview of the basic techniques for beginners in designing and making jewelry. A variety of tools and materials are used with a variety of different processes

Prerequisite: None

Corequisite: None

AVIA115 Aviation/Aerospace Workshop

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This workshop is designed to give prospective teachers of aviation/aerospace specific preparation to teach typical courses. It will cover such scientific aspects as aerodynamics, aircraft components, weight and balance, meteorology, physiology of flight, and the nature of outer space. Technologically it will include aircraft systems, basic navigation, radio navigation, communications, and the like. Other factors to be dealt with include air traffic control, federal aviation regulations, military applications, commercial and general aviation, and the aviation/aerospace education movement. Special force will be lent to the program by field trips and flight instruction, as well as the use of outstanding specialist consultants. This course will meet 3 sh of the laboratory requirements for general education.

Prerequisite: None

Corequisite: None

AVIA615 Aviation/Aerospace Workshop

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This workshop is designed to give prospective teachers of aviation/aerospace specific preparation to teach typical courses. It will cover such scientific aspects as aerodynamics, aircraft components, weight and balance, meteorology, physiology of flight, and the nature of outer space. Technologically it will include aircraft systems, basic navigation, radio navigation, communications, and the like. Other factors to be dealt with include air traffic control, federal aviation regulations, military applications, commercial and general aviation, and the aviation/aerospace education movement. Special force will be lent to the program by field trips and flight instruction, as well as the use of outstanding specialist consultants.

Prerequisite: None

Corequisite: None

BIOL102 Environmental Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course for non-majors integrates the introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems. It presents a treatment of central topics in environmental science by examining social, political, ethical, and economic factors that influence the biological aspects of environmental issues such as population control, pollution, land use, as well as conservation of natural resources and natural habitats. Laboratory exercises are designed to demonstrate some of the biological aspects of environmental issues and introduce students to basic processes used in environmental research. Meets general education requirement for laboratory science. May not be counted toward the Biology, Natural Sciences or Biology/Chemistry major requirements.

Prerequisite: None

Corequisite: None

BIOL103 Inquiry into Biology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops a strong conceptual understanding of life science and stresses the nature and the processes of science as they relate to the fundamental principles of biology that are emphasized in the National Science Education Standards. The course models hands-on, inquiry-based practices as students use reasoning, analysis, scientific processes, procedures and tools of scientific investigations to learn about the structure and functions of organisms, continuity of life and ecological systems.

Prerequisite: None

Corequisite: None

BIOL106 Principles of Biology 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to biology with emphasis on the chemistry of life, cell structure and function, cellular metabolism and cell reproduction. Laboratory exercises are designed to reinforce principles covered in lecture and to provide students with experiences in making observations, hypothesis testing, and data collection, analysis and interpretation. This course is designed for science and health science majors. This course may not be used in combination with BIOL101 to satisfy general education natural science requirements.

Prerequisite: None

Corequisite: None

BIOL107 Principles of Biology 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of Principles of Biology I with emphasis on cell reproduction and development, genetics, molecular biology, biological evolution and the diversity of life, and fundamentals of ecology. Laboratory exercises are designed to reinforce and supplement principles covered in lecture and to provide students with experiences in making observations, hypothesis testing, and data collection, analysis and interpretation. This course qualifies as a general education requirement in the natural sciences. May not be used in combination with BIOL101 to satisfy general education natural science requirements.

Prerequisite: (BIOL106)

Corequisite: None

BIOL108 Field Natural History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The life history, economic values, aesthetic values of plants and animals. Lab and field identification exercises requiring the use of field guides and keys. Introduction to natural history literature. This course fulfills the general education natural science requirement, but cannot be used for biology credit by biology majors.

Prerequisite: None

Corequisite: None

BIOL110 Intro Microbiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This course which is offered only at the Clearfield Branch Campus is designed to introduce the student to the study of bacteria, viruses, and other microorganisms and the role they play in human diseases. The laboratory includes techniques in the handling, isolation, cultivation, identification, and control of microorganisms. This course is designed for student nurses and will not satisfy a requirement toward a degree in Biology. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

BIOL200 Marine Biology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical factors affecting the biota in the intertidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology and ecological relationships. Laboratory and field exercises will emphasize the identification, anatomy, physiology, systematics and behavior of marine plants and animals as well as the physical and chemical properties of seawater. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL202 Genetics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An overview of the basic principles of Mendelian genetics, cytogenetics, molecular genetics, and population genetics. Laboratory exercises emphasize molecular techniques, statistical evaluation of results, and case studies.

Prerequisite: (BIOL106 AND BIOL107 AND CHEM121)

Corequisite: None

BIOL205 Marine Ecology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the interrelationships among animals, plants, and physical and chemical aspects of the marine environment with an emphasis on unique adaptations for survival. This class is taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL213 Introduction to Geographic Information Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to geographic information systems (GIS) with emphasis on capturing, storing, editing, querying, displaying, and analyzing geographically referenced data. Lecture and laboratory materials are designed to provide students with hands-on experience on real-world applications of GIS in their respective fields.

Prerequisite: None

Corequisite: None

BIOL220 DNA Methods in Biology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An overview of the uses of DNA-based methods in modern biology, such as forensic identification of humans and animals, species determination, parentage testing, medical diagnostics, and evolutionary biology. Topics include the history of DNA analyses, collection/preservation of DNA samples, DNA typing and sequencing applications, and DNA databases.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL240 Zoology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the animal kingdom with emphasis on evolutionary relationships within, between, and among constituent phyla. Lectures emphasize diversity, comparative anatomy, functional morphology, physiology, life history, ecology, and evolution. Laboratories emphasize and provide support for lecture concepts and comprise microscope analysis and gross animal dissection.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL245 Marine Invertebrates

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to utilize the marine invertebrate taxa to introduce students to the unique specializations that animals have evolved which allow them to successfully carry out the processes necessary for life and to exploit a wide variety of marine habitats. Major trends in invertebrate evolution will be used to illustrate the historical constraints upon these solutions and the necessity of narrative explanations of form and function in animals. It is assumed that each student has been introduced to the major taxa of animals in a prior introductory zoology course. Taxonomy will be used as a heuristic tool, but will not be stressed as a separate subject. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL240)

Corequisite: None

BIOL300 Plant Physiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course presents a treatment of central topics in modern plant physiology. Topics will include: plant-cell biology, ion transport, water relations, translocations, respiration, photosynthesis, mineral nutrition, nitrogen metabolism, plant hormones, senescence and abscission, stress physiology, and photomorphogenesis. Laboratory exercises are designed to demonstrate physiological processes in plants and introduce basic and advanced techniques used in plant physiological research.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL206 AND CHEM120 AND CHEM121)

Corequisite: None

BIOL301 Behavior of Marine Organisms

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL302 Developmental Biology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of classic embryology as well as relevant findings in cytogenetics, cell and molecular biology, and biochemistry, as it relates to structural and functional changes in molecules, cells, tissues, and organs during developmental cycles of plants and animals. Labs will include developmental study of living organisms as well as the study of prepared stages of development.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL202)

Corequisite: None

BIOL303 Vertebrate Endocrinology

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A survey courses of the major endocrine systems in vertebrates. An introduction to the chemistry and cellular mechanisms of action of different hormones is followed by in-depth discussions of the physiological effects of hormones. Topics include hypothalamic-pituitary interactions, reproduction, growth, osmoregulation, digestion and metabolism, and stress. Mammalian endocrinology is emphasized with discussion of important species differences in endocrine systems.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL202) OR (BIOL106 AND BIOL107 AND BIOL240)

Corequisite: None

BIOL305 Ichthyology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to the study of evolution, taxonomy and morphology of fishes. Emphasis is placed on biodiversity, morphology, and conservation of fishes. Lecture topics include the nomenclature, history and techniques of both ichthyology and fisheries biology. Laboratory emphasis will be on identification, dissection, and the standard techniques used in field collections.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL240)

Corequisite: None

BIOL310 Immunology

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This non-laboratory course is intended to be an introduction to the study of immunology. The components of the immune system, both cellular and humoral, and the immune implications of transplantation, cancer, allergies, and infections will be included. Immunopathology, such as immunodeficiency and autoimmune diseases, will be covered.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL202) OR (BIOL106 AND BIOL107 AND BIOL340)

Corequisite: None

BIOL312 Marine Botany

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is the study of the primary producers of the ocean, estuaries and terrestrial margins. This includes the study of phytoplankton, benthic macrophytes, salt marsh macrophytes, and other edge communities like salt flats, mangroves and dunes. Although taxonomy will be important, it is not the sole focus of the course. Plant physiology and ecology will be stressed. The laboratory portion of the course will stress practical methods of measurement of the plants and their environment. This includes voucher production and specimen preservation, basic physical and chemical methods of abiotic environment measurement, growth and constituent analysis of plant tissue, chlorophyll analysis and wet and dry weight determination for biomass. This class will be taught during summer sessions at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL206 AND CHEM120)

Corequisite: None

BIOL315 Comparative Vertebrate Anatomy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the study of the comparative anatomy of the Vertebrata. Emphasis is on form and function of the vertebrate classes with respect to each other and with respect to other subphyla, especially cephalochordates, within the phylum Chordata. The evolution of structure and function of the vertebrate classes is considered on a system by system basis. Comparative dissections of specimens from selected vertebrate classes will be carried out.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL317 Mycology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed examination of mushrooms, molds, and human mycoses, including an introduction to fungal ecology and assessment of fungal classification, as well as molecular systematics and an overview of medical significance. The course utilizes hands-on student-driven,

inquiry-based practices. Students will use scientific processes and procedures, data analysis, and research tools to investigate fungal morphogenesis, molecular diagnostics, culture techniques, ecological relationships, and human pathogenesis.

Prerequisite: (BIOL202 AND CHEM121)

Corequisite: None

BIOL321 Marine Molecular Technology: Applications for Management and Forensics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will gain an overview of modern molecular technology and how it can be applied to the management of marine organisms and the forensics field. The laboratory component will allow students to learn some of the most widely used techniques and instrumentation in the molecular field.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL323 Bioinformatics and Genomics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Introduces students to the recent technological advances in the life sciences that allow DNA sequencing of entire genomes, as well as analysis of the gene products of whole genomes simultaneously in one experiment. Topics include the structure and mechanics of the eukaryotic genome, transcriptome, and proteome in detail, with emphasis on hands-on exercises using public databases and software to extract, analyze and manipulate DNA and protein sequences.

Prerequisite: (BIOL202)

Corequisite: None

BIOL328 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar fulfills the natural and mathematical science seminar requirement in general education for the Bachelor of Arts degree; it does not fulfill biology majors course requirements but may be selected as a general education elective by biology majors. Topics studied each semester vary, but have included selected readings on ethics in science, evolution, genetics and genetic engineering, behavior, the brain, physiology, medicine and the world's environment. Assigned readings are used as a starting point for further student research and presentations. The interrelationships of biology with other disciplines such as economics, political science, and history are considered. A primary goal of this seminar is to increase the student's exposure to some contemporary topics of biology.

Prerequisite: None

Corequisite: None

BIOL330 Cellular & Molecular Biology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An in-depth study of the chemicals, organelles, and molecular genetics of cells. Lectures and a fifteen-week cloning laboratory give theoretical and hands-on experience in advanced molecular techniques, such as gel electrophoresis, DNA isolation,

Prerequisite: (BIOL202 AND CHEM221)

Corequisite: None

BIOL340 Microbiology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A study of the anatomy, physiology, and taxonomy of microorganisms with a primary emphasis on prokaryotes. The laboratory component provides critical hands-on experience in standard bacteriological techniques involving the handling, cultivation, isolation, and identification of microorganisms. Additional emphasis will be placed on the role of bacteria, viruses, and other microorganisms in environmental and public health issues.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL202 AND CHEM121)

Corequisite: None

BIOL400 Ecology of Marine Plankton

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the phytoplankton and zooplankton in marine and brackish environments. In laboratory qualitative and quantitative comparisons will be made between the planktonic populations of various types of habitats in relation to primary and secondary productivity. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL309)

Corequisite: None

BIOL402 Biological Evolution

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intended for students interested in examining in detail the phenomenon of biological evolution. Although topics such as Cultural Evolution and Creationism will be considered briefly, the focus of this offering will be evolution as manifest in natural, biological systems. Topics to be presented via lecture and student presentation will include Population Genetics, Darwinism, Natural Selection, Sexual Selection and Altruism, Molecular Evolution, Human Origins and Evolution and Extinction.

Prerequisite: (BIOL202)

Corequisite: None

BIOL403 Coral Reef Ecology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of coral reef structure, formation, types, and the relationships of reef organisms to their environment. Emphasis is given to species diversity, identification, symbioses, and effects of temperature, salinity, light, nutrient concentration, predation, and competition on the abundance and distribution of coral reef organisms. This class will be taught during summer sessions at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL405 Field Ecology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced study of terrestrial community ecology including interactions between animal and plant populations. Special emphasis will be placed on standard techniques for estimating population size of various taxa, sampling plant community structure and statistical analysis and written interpretation of data.

Prerequisite: (BIOL309)

Corequisite: None

BIOL409 Ornithology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of identification of birds in the field, by study skins and by song. It includes study of basic bird biology, evolution, natural history, ecology, research methodologies, biodiversity and conservation.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL410 Organismal Physiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of homeostatic mechanisms and systems in organisms and their relation to fundamental chemical and physical events in cells. Topics such as bioenergetics, osmoregulation, movement, and information processing are discussed as they relate to the function of organisms.

Prerequisite: (BIOL106 AND BIOL107 AND CHEM121)

Corequisite: None

BIOL411 Aquatic Biology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Flora and fauna of fresh water ecosystems. Emphasis on the biotic, physical and chemical characteristics of lotic and lentic systems and how these may affect abundance, distribution, and evolution within aquatic communities. Ecological effects of water pollution and some

possible solutions for our increasing world problems. Laboratory will stress use of keys, field methods of water analysis, and applied techniques of individual scientific research.

Prerequisite: (BIOL106 AND BIOL107 AND CHEM121)

Corequisite: None

BIOL413 Entomology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A broadly balanced introduction to the insect world including structure and function, life cycles, habits, reproduction and development, disease relationships and agricultural implications. Students will be expected to collect and identify insect specimens.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL415 Environmental Policy & Regulations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of significant United States Federal and Pennsylvania legislation and regulations pertinent to the study, protection and management of our biological resources. The legislation and rulemaking processes relevant to environmental issues will be investigated. The biological basis for resource management decisions and the role of the scientist in advocating, writing and implementing environmental legislation and regulations will be examined in detail.

Prerequisite: (BIOL309)

Corequisite: None

BIOL422 Biological Oceanography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates the interactions among ocean communities (planktonic, benthic and nektonic) and the marine environment (chemical and physical). The effects of the environment on the distribution and abundance of marine organisms as well as their effect on the environment are emphasized. This class will be taught during summer sessions at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107)

Corequisite: None

BIOL425 Environmental Toxicology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to environmental toxicology and an interdisciplinary study of the major classes of pollutants as well as ecotoxicology testing methods. Focus is on the effects of environmental toxins on living organisms and the ecosystem.

Prerequisite: (BIOL309 AND CHEM205) OR (BIOL309 AND CHEM220)

Corequisite: None

BIOL440 Environmental Microbiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a fundamental knowledge base of general microbiology, microbial ecology, and specific microbial processes essential to many sub-disciplines of environmental microbiology. Through intensive discussions, applied research investigations, and hands-on laboratory- and field-based experiences, students will be introduced to a variety of topics that are central to understanding microbial diversity and microbial evolution.

Prerequisite: (BIOL340 AND CHEM205) OR (BIOL340 AND CHEM220)

Corequisite: None

BIOL450 Biology Senior Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A discussion-based course in which students read and critically evaluate journal articles, then present seminars and lead discussions on the articles. Students are also required to submit a research proposal on a topic agreed upon with the instructor. Themes and topics will vary with the instructor.

Prerequisite: None

Corequisite: None

BIOL628 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Topics studied each semester vary, but have included selected readings on ethics in science, evolution, genetics and genetic engineering, behavior, the brain, physiology, medicine and the world's environment. Assigned readings are used as a starting point for further student research and presentations. The interrelationship of biology with other disciplines such as economics, political science, and history are considered. A primary goal of this seminar is to increase the student's exposure to some contemporary topics of biology. Additional coursework will be required for graduate level.

Prerequisite: None

Corequisite: None

CHEM101 Chemistry in the Environment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Designed to provide students with an introduction to chemical principles as they apply to important issues in everyday life. The American Chemical Society program Chemistry in Context serves as the basis. The laboratory experience emphasizes the scientific method and is designed to reinforce the topics from the lecture. Students make real world measurements as part of investigations of their environment and the applications of chemistry to their lives. Designed for students who have had no or limited high school chemistry. Does not satisfy requirements for a natural science major or minor. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

CHEM103 The Chemistry of Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explore the intersection of chemistry with the visual arts. Basic principles of chemistry will be applied to the topics of color, paint, paper, clay, glass, metals, photography, and art restoration. Important chemical concepts and safety concerns will be investigated to learn how to properly handle art materials. Introduces the chemical and physical properties. Laboratory investigation will reveal how these properties change when substances are mixed.

Prerequisite: None

Corequisite: None

CHEM105 Forensic Chemistry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to chemical principles as they apply to forensic investigations. By applying the scientific method to these basic principles, students will investigate the role of chemistry in solving crimes. The laboratory experience is designed to reinforce the scientific method and the topics from the lecture. Students make real world determinations as they investigate and apply chemistry to their lives. Meets general education lab science requirement, except for a natural science major or minor.

Prerequisite: None

Corequisite: None

CHEM111 Chemistry of Nutrition

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the chemistry of nutrition emphasizing nutrients and their interactions in the body. The chemical composition, energy value and by-products of food elements and water will be related to the needs of the human system. Nutrition will be studied not only from the point of view of how to get the necessities of life, but also what effect they have on the human being.

Prerequisite: None

Corequisite: None

CHEM121 Principles of Chemistry 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The second of two semesters of a standard general chemistry sequence. Topics include solids and liquids, solutions and solubility, kinetics, equilibrium, acids and bases, spontaneity and free energy, electrochemistry and nuclear chemistry. The chemistry laboratory work is introductory in nature and follows several of the lecture topics. Qualitative analysis is included as part of the laboratory experience.

Prerequisite: (CHEM120)

Corequisite: None

CHEM205 Introduction Organic Chemistry

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to the subject of organic chemistry for students in majors that need some basic knowledge of organic chemistry. This course uses an integrated approach to the chemistry of organic compounds and emphasizes a problem-solving approach to the subject. Many examples of biologically important molecules will be used. The laboratory segment of the course introduces the student to the physical and chemical properties of organic compounds, the techniques used to separate and purify organic compounds, the synthesis of selected organic compounds, and the identification of unknowns by their physical and chemical behavior. Proper handling of chemicals is stressed throughout the course.

Prerequisite: (CHEM121)

Corequisite: None

CHEM220 Organic Chemistry 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An integrated course covering the properties, reactions, and preparations of both aliphatic and aromatic compounds from the functional group approach. Explanations given in terms of mechanisms, rearrangements, stereochemistry, and energy diagrams. Lab consists of introduction to techniques of separation, some representative preparations including a sequence, and the identification of unknowns by their chemical behavior.

Prerequisite: (CHEM121)

Corequisite: None

CHEM221 Organic Chemistry 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

CHEM221 is a continuation of CHEM220. Relies heavily on concepts and laboratory techniques learned in CHEM220. Students are encouraged to derive from CHEM220 the fundamental concepts underlying the reactions, mechanisms and synthesis of organic compounds presented in CHEM221. The chemistry of carbonyl compounds and aromatic compounds is emphasized. Laboratory experiments emphasize the identification of unknowns by their physical and chemical behavior and the synthesis of organic compounds. Design of experimental procedure will be stressed.

Prerequisite: (CHEM220)

Corequisite: None

CHEM301 Inorganic Chemistry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to fundamental concepts of inorganic chemistry including atomic and molecular structure, bonding theories, group theory, coordination chemistry and descriptive chemistry of the elements.

Prerequisite: (CHEM221)

Corequisite: None

CHEM302 Introduction to Computational Chemistry

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

An introduction to the field of computational chemistry including molecular mechanical, semi-empirical, ab initio wavefunction, and density functional modeling of chemical systems. Two goals of this course are to enable students to use computational chemistry in their studies and to be critical consumers of computational chemistry results in scientific literature.

Prerequisite: (CHEM221 AND MATH141)

Corequisite: (PHYS131) OR (PHYS171)

CHEM316 Quantitative Analysis

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to statistical analysis of experimental data, validation of analytical methods, gravimetric analysis, potentiometric measurements, and electrodes. An advanced examination of stoichiometric calculations, chemical equilibrium, acid-base equilibria, acid-base titrations, and complexometric reactions/titrations. Laboratory experimentation involves titrations, gravimetric analysis, electrochemical measurements, and statistical analysis.

Prerequisite: (CHEM121)

Corequisite: None

CHEM317 Instrumental Analysis

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Fundamentals of spectroscopy, chromatography, electrochemistry, and mass spectrometry. Lecture topics include data treatment, data interpretation, theory of the underlying principles, and basic operating principles. Special attention is given to how these techniques are used to solve analytical problems, examples being taken from other areas of science. Laboratory experiments focus on the operation, maintenance, and optimization of instrumentation and interpretation of laboratory data

Prerequisite: (CHEM316) OR (CHEM421)

Corequisite: None

CHEM320 Physical Chemistry 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A study of the content and transfer of energy in physical and chemical reactions. The laws of thermodynamics, and the concepts of work, enthalpy, entropy, and free energy are defined and given in a detailed quantitative treatment. The course also provides a detailed introduction to the topics of kinetics and reaction dynamics. The laboratory portion of the course is designed to provide students experience with a broad range of the topics covered during the course.

Prerequisite: (CHEM220 AND MATH141 AND PHYS130) OR (CHEM220 AND MATH141 AND PHYS170)

Corequisite: (CHEM316 ANDPHYS131) OR (CHEM316 ANDPHYS171)

CHEM328 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in chemistry. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

CHEM330 Chemical Literature

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to important library resources in chemical research (i.e. handbooks, reviews, monographs, compendiums and abstracts). Emphasis will be given to development of systematic library search strategies and information retrieval from library resources. Special emphasis will be given to instruction in the hands-on use of computerized scientific databases. Pre- or Co-requisite: CHEM221 or permission of instructor.

Prerequisite: None

Corequisite: (CHEM221)

CHEM350 Polymer Chemistry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Major topics in polymer chemistry will be examined. Structure, synthesis, characterization, properties, and uses of polymers will be discussed. Much of the focus will be on polymers used or produced in industry.

Prerequisite: (CHEM221)

Corequisite: None

CHEM404 Spectroscopic Methods of Molecular Structure Determination

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the interpretation of spectral data. Theory of each spectroscopic method, sample preparation, instrumentation and applications of each method will also be discussed. Problems will be presented in class to demonstrate logical approaches to solving spectral problems. Student in-class problems will be used to generate open discussion. Spectral problems will be used to reinforce concepts and approaches to determining the structure of unknowns. Examples from both organic and inorganic chemistry will be used.

Prerequisite: (CHEM320)

Corequisite: (CHEM321)

CHEM410 Biochemistry

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Provides an introduction to modern biochemistry at the molecular level. Emphasis will be given to the structure and function of the major classes of biomolecules (proteins, nucleic acids, carbohydrates and lipids) and the bioenergetics of metabolic pathways. The laboratory

portion will include the application of modern biochemical methods of analysis to the problems of: purification and characterization of biomolecules, quantitative measurement of enzyme activities, and the evaluation of metabolic processes.

Prerequisite: (CHEM221) OR (CHEM205)

Corequisite: None

CHEM415 Biochemistry 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Presents an overview of the metabolic transformations of fatty acids and the complex lipids, amino acids and the purine and pyrimidine nucleotides. Emphasis will be given to biological synthesis of the building blocks of the major classes of biomolecules. The course will also provide an introduction to cellular signaling and specialized topics in biochemistry. The laboratory portion will expand on the techniques learned in first semester with application to independent/small group projects.

Prerequisite: (CHEM410)

Corequisite: None

CHEM430 Advanced Organic Chemistry

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An in-depth study of organic chemistry with major emphasis on physical aspects as applied to syntheses, spectroscopy, structure elucidation, and reaction mechanisms. The laboratory component will emphasize advanced experimental techniques used in synthesis, mechanism elucidation, and the characterization of organic compounds.

Prerequisite: None

Corequisite: None

CHEM440 Advanced Inorganic Chemistry

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An examination of major topics in descriptive and theoretical inorganic chemistry including acid-base chemistry, oxidation and reduction, chemistry of transition metals, organometallic chemistry, catalysis, inorganic clusters, solid state and bioinorganic chemistry. The classical and modern aspects of the chemistry of the elements will be discussed. The laboratory component emphasizes advanced experimental techniques in the synthesis and characterization of inorganic compounds.

Prerequisite: (CHEM301)

Corequisite: None

CHEM628 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in chemistry. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

CHIN102 Chinese 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None

CHIN201 Chinese 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

CHIN202 Chinese 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

CHIN328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

CISC119 Freshman Seminar: Introduction to Computing and Problem Solving

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

The first year seminar is designed to introduce the student to the culture and mission of the university within the context of an academic discipline of choice. The course will explore the purpose of one's college education and provide the student an opportunity to become engaged with the academic field of interest. The student will be introduced to basic college learning and study skills in the context of the content area. Through ample class discussion of common readings, the student will engage in active learning. Common co-curricular activities and the incorporation of a peer mentor component will facilitate the first year student's connection with fellow students and faculty in the university community. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

CISC150 Introduction to Computers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Provides an introduction to computing systems and their applications in modern society. It acquaints students with the organization and operation of computer systems. Students are introduced to a variety of applications such as word processing, spreadsheets, database management, and web development.

Prerequisite: None

Corequisite: None

CISC200 Fundamentals of Networking

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces fundamentals of computer networks and the Internet. The TCP/IP protocol stack is introduced and concepts are discussed. Application layer protocols used for FTP, Web and email access, DNS etc are studied using network surveillance tools. Transport layer protocols TCP and UDP are investigated. Students learn the concept of IP address assignment, Router configuration and the physical layer. This course will introduce the students to the workings of the Internet Engineering Task Force and the standardization process.

Prerequisite: (CISC150) OR (COMP119) OR (CISC119)

Corequisite: None

CISC205 Web-Based Application Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of business application development using web-based technologies.

Prerequisite: (COMP160)

Corequisite: None

CISC220 Contemporary Issues in Computing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the legal, social, and ethical issues that arise from the use of technology and the responsibilities that all technology users, including computer scientists, have with regard to these developments.

Prerequisite: (COMP150) OR (CISC150) OR (COMP160)

Corequisite: None

CISC255 Database Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to database design at the enterprise level. Coverage includes the development of logical and conceptual models, translation into the internal model using Structured Query Language (SQL), creation of complex queries, query optimization and the use of triggers and stored procedures.

Prerequisite: (CISC250) OR (COMP161)

Corequisite: None

CISC260 Information Technology Project Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces fundamentals of project management using both concept and application. A generic Information Technology Project Methodology (ITPM) is used. The nine areas of the Project Management Institute's Project Management Body of Knowledge (PMBOK) are incorporated.

Prerequisite: (ACCT110 AND CISC250 AND MANG101)

Corequisite: None

CISC304 Data and Computer Communications

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the student to communications architectures used in the Business and the Services Industry. The network is viewed from an end-to-end perspective as a system of cooperating functional blocks. Covers Public Switched Telephone Network, Voice over IP, Wireless Wide Area Networks, Satellite communications and WAN/MAN technologies using MPLS. Security frameworks, Network Management and protocol vulnerability are topics covered in this course. The student is also introduced to optimization techniques, accounting issues and capacity analysis.

Prerequisite: (CISC200)

Corequisite: None

CISC306 Systems Analysis and Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the systems concept, defining a system, system life cycle and information flow, systems analysis and design considerations, implementation and development of information systems. Through analysis of systems, simulated case studies, the use of CASE software, and the design of an actual business application, students learn the importance of efficient and effective information systems in modern organizations.

Prerequisite: (CISC255)

Corequisite: None

CISC330 Emerging Business Technologies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course examines issues related to the availability and use of information systems in the automated business: system identification, analysis and design, cost justification, implementation, training, maintenance, and management from domestic and international perspectives.

Prerequisite: (COMP306) OR (CISC306) OR (ACCT215)

Corequisite: None

COMM100 Introduction to Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of the process of communication on the personal, group, and mass levels. Survey and analysis of the basic communication process and techniques as applied to various communication situations. Consideration of both the art and technical aspects of communication. Meets general education speech requirement.

Prerequisite: None

Corequisite: None

COMM102 Fundamentals of Public Speaking

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to develop the study and performance of speech as a means of communication, self-expression, and social control in a diverse society while incorporating theory and techniques of speaking and listening into a variety of speech activities. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

COMM103 Small Group Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The theory and practice of small group communication. Students learn the techniques of how to lead a discussion and how to participate in a discussion. The topics of discussion are chosen primarily from current events. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

COMM104 Interpersonal Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Covers the cognitive, the affective and the skill levels involved in the interpersonal communication process. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

COMM150 Intro Mass Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of mass communication with emphasis on historical development, economic structure, organization, function, language, culture, and the effects of the media in society today. The course will also focus, to a lesser degree, on the differences between mass communication and other forms of communication.

Prerequisite: None

Corequisite: None

COMM190 Writing for the Mass Media

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines basic principles of effective journalistic composition, emphasizing in particular the development and organization of ideas relevant to news events and the expression of those ideas in clear expository prose. Students will read a variety of prose models and write a specified number of news articles. The news writing process includes researching, interviewing, drafting, revising, and submissions in a timely fashion.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM200 Voice and Articulation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Improvement of the physical act of speaking through work on diction, projection, vocal quality, pitch, and time factors. Physiological, phonetic, and psychological foundations considered. Students will be introduced to the rudiments of the international phonetic alphabet. Individual and group activities are an integral part of this course. Class attendance is a critical part of the successful completion of this course.

Prerequisite: None

Corequisite: None

COMM202 Supervised Communication Practicum

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 6 sh]

The primary focus is upon pre-professional communication praxis. Close supervision by journalism and mass communication faculty members is required to ensure a high quality field experience.

Prerequisite: (COMM190)

Corequisite: None

COMM205 Computer-Mediated Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will use techniques of computer word-processing and other applications to compose sophisticated written documents. Primary focus is on using computers to improve design, composition, editing, and revision skills.

Prerequisite: (CISC150 AND ENGL100) OR (CISC150 AND HONR111)

Corequisite: None

COMM208 Communication Theory

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Surveys dominant theories in interpersonal, group, public, and mass communication. Emphasis is placed on both establishing frameworks that provide a contest for each theory and demonstrating how theories help illustrate the process of communication in applied settings.

Prerequisite: (COMM100) OR (COMM102) OR (COMM103) OR (COMM104)

Corequisite: None

COMM210 Gender and the Mass Media

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of significant issues and representational practices concerning the relationship among women, men, and the mass media. Students will examine the sociological, historical, and cultural construction of gender and the influence of the media upon these processes.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM215 Sports Broadcasting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examination of the industry, history, practice, ethics and theory of sports broadcasting. Particular attention given to sportscasts, play-by-play and color commentaries and production techniques.

Prerequisite: None

Corequisite: None

COMM220 Oral Interpretation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theory and techniques of oral interpretation. Class activities include selection, analysis, preparation and presentations of selections from prose fiction, drama and poetry.

Prerequisite: None

Corequisite: None

COMM250 The Movies Look at the Media Professions

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Encourage students to think critically about the media professions - journalism, advertising, public relations, and the entertainment industries - by watching and analyzing movies about them. Students will compare these filmic representations with scholarly and critical readings that explore how media professionals and others view the work that they do.

Prerequisite: (COMM150)

Corequisite: None

COMM290 News Reporting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the practical knowledge and skills used in reporting news. Students will build upon news writing skills developed in COMM190 by concentrating on the use of news gathering techniques, including research and interviewing.

Prerequisite: (COMM190)

Corequisite: None

COMM292 Principles of Advertising

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the psychology, sociology, economics, and philosophy of advertising with special reference to planning, production, and testing of copy. The course focuses on the role and impact of advertising on society.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM295 Radio Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of skills in reporting and writing for radio. Use of cassette and tape cartridge machines, and manual and electronic editing are introduced.

Prerequisite: (COMM190)

Corequisite: None

COMM300 Organizational Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine verbal and written communication that occurs in organizations. Included in this focus are, among other topics, informal and formal methods of communication, power bases, leadership and corporate communication flow.

Prerequisite: None

Corequisite: None

COMM301 Listening and Conflict Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Introduces students to concepts of listening and teaches them how to manage conflicts through a variety of effective methods. Students will develop skills involved in the listening process to increase their understanding of others' thoughts and feelings and gather accurate information. They will overcome barriers to effective listening and be able to provide more accurate responses to questions. Students study and broaden their own conflict management styles. Students learn the principles of mediation and negotiation.

Prerequisite: (COMM102) OR (COMM103) OR (COMM104)

Corequisite: None

COMM303 Argumentation & Debate

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to improve analytical skills in construction of arguments and the debating skills of defending those arguments, and to develop the critical listening skills needed to analyze and evaluate the arguments of others. A study of the theories of argumentation and their practical application to debate.

Prerequisite: (COMM1**) OR (SPCH1**)

Corequisite: None

COMM304 Intercultural Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces verbal and non-verbal intercultural communication as they apply to a variety of cultures, including American subcultures. Discussion topics will include: the impact that cultural differences have on language, culture and communication, value differences, non-domestic cultures, verbal and non-verbal interaction. Students will investigate the implications of intercultural communication on business, education and tourism.

Prerequisite: (COMM102) OR (COMM103) OR (COMM104) OR (COMM110) OR (COMM202)

Corequisite: None

COMM305 Television Criticism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of contemporary critical methods used to examine the aesthetic and sociological aspects of television. Extensive reading in critical literature is supplemented by analyses of selected television programs.

Prerequisite: (COMM190)

Corequisite: None

COMM315 Corporate Video Production

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the planning and production of video programs for business, industry, and nonprofit institutions. Focus is on the use of video as a promotions tool in the business sector. Recommended for students with an interest in public relations.

Prerequisite: (COMM295)

Corequisite: None

COMM317 Radio Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop providing direct practical experience in radio. Develops skills in producing dramatic musical productions as well as commercials and Public Service Announcements.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM318 Video Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basic principles and skills associated with effective television performance. The course emphasizes those skills necessary for practicing television journalists.

Prerequisite: (COMM190)

Corequisite: None

COMM320 Business Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced practice in effective speaking and listening: reports and sales presentations, policy speeches, and conference leadership techniques employed in business and industry. Special attention is paid to the vital role management plays in developing, initiating and maintaining effective communication within the business/industrial setting.

Prerequisite: (COMM102) OR (COMM103) OR (COMM104) OR (COMM202)

Corequisite: None

COMM325 Film Today

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will examine current and recent cinema, critically evaluating films of all kinds. These will include products of the American film industry, independent, documentary, and experimental films, films made for television and video-cassette, and foreign films released in this country.

Prerequisite: (COMM150)

Corequisite: None

COMM328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A contextual or situational approach to communication studies with emphasis on investigation, analysis, and critique. Topics might include, among others, political rhetoric in a presidential election, communication in the workplace, current issues in cross-cultural communication, modern trends in relationship development, and forensic methods for educators.

Prerequisite: (COMM1**)

Corequisite: None

COMM330 Cultural Studies in Mass Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the issues of access and representation in the mass media. Of central interest are the constraints and possibilities for change in the media industries' structures, practices, and relationships with social change coalitions concerned about gender, race, ethnicity, class, sexual orientation, and other markers of cultural identity.

Prerequisite: (COMM150)

Corequisite: None

COMM333 Public Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The nature and scope of public relations; the principles and techniques underlying the practice of public relations. Emphasis on the public relations practitioner as a communication specialist who explores and maintains channels of communication between organizations and the public.

Prerequisite: (COMM102) OR (COMM103)

Corequisite: None

COMM340 Advertising Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advertisements that can be designed on a computer constitute the content of the course. Enticement, composition, and impact form the three theoretical areas upon which advertising design will focus.

Prerequisite: (COMM190)

Corequisite: None

COMM350 Introduction to Communication Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the basics of research in the field of communication. Through reading, class discussion, lecture, exercises and assignments, students will explore how to write a professional, academic or business research proposal. In addition, students will critically analyze others' research.

Prerequisite: None

Corequisite: None

COMM355 Environmental Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Presents the writing techniques students need to communicate simply and effectively for the media about science, environment, health and medical topics.

Prerequisite: (COMM290)

Corequisite: None

COMM360 Communication Analysis

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Analyzes the persuasion that impacts us all, often beneath the level of awareness. Students explore the process and purpose of analyzing and critiquing messages that affect social and political stability; self-fulfillment and personal happiness; and meaningful and healthy relationships. Students make connections between the rhetorical message and ideas such as quality, value, goodness, and rightness to ensure that the power of rhetoric is used competently.

Prerequisite: (COMM1**) OR (COMM1**)

Corequisite: None

COMM370 Topics in Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A topical approach to applied journalism practice designed to explore specialized knowledge and skill pertinent to the work of media practitioners. Topics might include, among others, business news, education news, agricultural public relations, television directing, concepts of computer graphics for print and broadcast, and desktop publishing.

Prerequisite: (COMM290)

Corequisite: None

COMM375 Persuasion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the factors related to attitude-change through oral communication. General theories of persuasion and an introduction to modern experimental research in the area included.

Prerequisite: (COMM102) OR (COMM103) OR (COMM104) OR (COMM202)

Corequisite: None

COMM390 Feature Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Focus is on writing issue-oriented features and personality profiles. Attention given to structure, style, and content of features and to various ways to begin and end features. Also discussed are techniques of fiction writing that can be applied to features.

Prerequisite: (COMM190 AND ENGL100) OR (COMM190 AND HONR111)

Corequisite: None

COMM391 Sports Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop providing direct practical experience in sports writing. Focus is on news gathering and writing techniques. Attention also given to ethics, business and financial aspects of sports, sports columns, investigative sports writing, sports features, and the history of sports writing.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM392 Documentary Film

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the art and development of non-fiction film, examining the major documentary film movements and filmmakers.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM393 News Editing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Editing copy and designing news pages and news programs constitute the core of this course. In addition, some attention will be given to the elements of typography and computer usage in the newsroom.

Prerequisite: (COMM190 AND ENGL100) OR (COMM190 AND HONR111)

Corequisite: None

COMM400 Communication Capstone Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to use a workshop format to address communication theories, communication issues as they relate to the public, and practical applications. Students will read, discuss and analyze various communication theories, develop a major research project and a professional portfolio, and explore current issues affecting the industry, including the impact of emerging technologies and matters of professional ethics and responsibility. Topics will be addressed from the perspective of the student's major emphasis.

Prerequisite: (COMM330) OR (COMM3**)

Corequisite: None

COMM405 Communication and Responsibility

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore the appropriate and effective use of words and actions as they affect our communication and relationships. We discuss theories and standards by which our communicative acts are chosen and evaluated. We discuss responsible communicative choices we make in order to refine our various communicative paradigms. Finally, this course can help communicators deal with the consequences that result from using language and nonverbal communication competently and ethically.

Prerequisite: (COMM1** AND PHIL102) OR (COMM2** AND PHIL102)

Corequisite: None

COMM450 Opinion Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Writing opinion in the form of editorials and reviews. For editorial writing, the course will use a critical thinking model to analyze social issues; for review writing, it will focus on aesthetic issues in various art forms.

Prerequisite: (COMM190)

Corequisite: None

COMM488 Case Studies in Public Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A case study approach to examine concrete public relations settings and situations that illustrate the possibilities and limitations of public relations effectiveness. Students explore the range of strategies that businesses, nonprofit organizations, and government agencies have adopted in varied circumstances and learn how to assess the practical and ethical implications of these strategic choices thus developing an effective public relations management perspective.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM491 Propaganda and Public Opinion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of propaganda and public opinion from World War II to the present. Special emphasis is given to the media of propaganda. The course also focuses on propaganda strategies in industrial and non-industrial countries.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM493 Online Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Examines new media technologies used to communicate newsworthy information over the Internet. Primary foci are gathering data and constructing new forms of news. Students gain practical experience in delivering information electronically.

Prerequisite: (COMM190)

Corequisite: None

COMM494 Communication Law & Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of First Amendment law as it affects the press, and a survey of broadcast regulations. Students explore the relationships of law and ethics and examine and discuss ethical problems and practices.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM495 Public Relations Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Writing news releases, annual reports, speeches, two-fold brochures, radio scripts, sports backgrounders, print advertisements, and political papers forms the center of this course. In addition, designing newsletters and fund raising packets is considered.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

COMM496 Advertising Campaign Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Acquaints students with the major phases involved in the development of an advertising campaign, from market research, creative copy writing and advertising design, to media placement and the testing of advertising effectiveness. Students examine and critique specific advertising campaigns and construct a campaign for a specific client as a major course project.

Prerequisite: (COMM292)

Corequisite: None

COMM628 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach to mass communication texts, practices, or policies, with emphasis on analysis, synthesis, and critique. Topics might include, among others, the media and terrorism, media effects and consequences, comparative study of international news processes, trends and issues in photojournalism, and media representations of disability, ethnicity and age.

Prerequisite: None

Corequisite: None

COMM630 Cultural Studies in Mass Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the issues of access and representation in the mass media. Of central interest are the constraints and possibilities for change in the media industries' structures, practices, and relationships with social change coalitions concerned about gender, race, ethnicity, class, sexual orientation, and other markers of cultural identity.

Prerequisite: None

Corequisite: None

COMM691 Propaganda & Public Opinion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of propaganda and public opinion from World War II to the present. Special emphasis is given to the media of propaganda. The course also focuses on propaganda strategies in industrial and non-industrial countries.

Prerequisite: None

Corequisite: None

COMM694 Communication Law & Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of First Amendment law as it affects the press, and a survey of broadcast regulations. Students explore the relationships of law and ethics and examine and discuss ethical problems and practices.

Prerequisite: None

Corequisite: None

COMP119 Freshman Seminar: Introduction to Computing and Problem Solving

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

The first year seminar is designed to introduce the student to the culture and mission of the university within the context of an academic discipline of choice. The course will explore the purpose of one's college education and provide the student an opportunity to become engaged with the academic field of interest. The student will be introduced to basic college learning and study skills in the context of the content area. Through ample class discussion of common readings, the student will engage in active learning. Common co-curricular activities and the incorporation of a peer mentor component will facilitate the first year student's connection with fellow students and faculty in the university community. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

COMP160 Programming 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Provides an introduction to computing systems and computing facilities at Lock Haven University, and an overview of computer programming as a discipline and profession. Students study algorithm design and development using pseudo code. They implement algorithms using an Object Oriented high level programming language. The emphasis is on Classes, Objects, and Methods and topics include data types and storage, control structures, functions, arrays and files. This course will also provide an introduction to Object Oriented Design of Software and generic Integrated Development Environment.

Prerequisite: (MATH112) OR (MATH113) OR (MATH141)

Corequisite: None

COMP161 Programming 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Continuation of Programming I providing intermediate to advanced programming techniques in the programming language introduced in Programming I. Emphasis is placed on object-oriented techniques and modular design as well as algorithm design involving library objects, advanced techniques for input and output (I/O) and exception handling, and elementary data structures.

Prerequisite: (COMP160)

Corequisite: None

COMP202 Systems Programming

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the design and environments for software systems through an examination of a variety of topics. These topics include advanced command structures of operating systems, shell scripting, programming in C/C++, interpreters, software version control systems, and basic systems administration.

Prerequisite: (COMP161)

Corequisite: None

COMP215 Assembler Language

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to assembler language and machine organization. Introduced are the structure of a "byte" machine, the manipulation of data in various forms, the binary and hexadecimal number systems, operations and scaling, integer arithmetic in binary and packed decimal, various comparison and branching ideas, indexing, input/output, subroutines, and interface with high-level languages.

Prerequisite: (COMP161)

Corequisite: None

COMP302 Object-Oriented Programming for Business

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Covers business application development using advanced object-oriented programming techniques.

Prerequisite: (COMP161)

Corequisite: None

COMP315 Network Programming

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students the necessary skill-set to design and implement software that employ Internet Protocols at various layers of the standards-based stack. Students will be introduced to the socket Application Programmer Interface (API), the transport layer, raw sockets that allow network layer programming, and specialized libraries that makes packet creation and injection possible at the data link layer. These skills will prepare students to design and build prototypes operating at various layers of the protocol stack.

Prerequisite: (CISC200)

Corequisite: None

COMP320 COBOL Programming for Business

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of business programming techniques with file manipulation and table driven programs using the COBOL programming language.

Prerequisite: (COMP161)

Corequisite: None

COMP328 Computer Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

COMP400 Computer Architecture

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to give students a basic understanding of the organization and relationship of components of computer systems. Concepts discussed include analysis and design of digital circuits, design of major components of computer systems, and interface of software and hardware in the control of hardware components.

Prerequisite: (COMP215 AND COMP300)

Corequisite: None

COMP402 Algorithm Analysis and Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Provides a survey of classic and modern computer algorithms, demonstrates techniques to analyze algorithm performance and illustrates the design methodologies used to develop computer algorithms.

Prerequisite: (COMP300 AND MATH205 AND MATH211)

Corequisite: None

COMP405 Software Engineering

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an introduction to the engineering principles and practices used in the process of developing modern software systems that are dependable, usable, maintainable and efficient. Students will learn the basic models of software system development including the classic waterfall and spiral models. Students will learn the processes used in these development models including requirements analysis and specification, design, prototyping, implementation, integration and testing and verification and validation. Students will learn what products are produced at each stage including reviews and documents as well as the software itself. Students will be introduced to utilities such as the configuration management software and the computer-aided software engineering (CASE) tools available to support the software development process. Students will also be introduced to concepts in project management including planning and scheduling, risk mitigation, and the use of metrics.

Prerequisite: (COMP300)

Corequisite: None

COMP410 Artificial Intelligence

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the nature of Artificial Intelligence (AI) and knowledge representation. Investigation of matching, search and control techniques for AI. Study and use of programming languages (i.e., LISP) as applied to AI. Application of AI to knowledge-based and expert systems.

Prerequisite: (COMP300)

Corequisite: None

COMP415 Structure Programming Languages

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of language design, language processors, syntax, and semantics. What makes a language good or bad and similarities in different languages? Brief introduction to a variety of high-level languages, such as Pascal, C, SNOBOL, PROLOG, ADA, LISP, MODULA-2, which contain advanced features.

Prerequisite: (COMP300)

Corequisite: None

COMP460 Compiler Theory & Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to give students a basic understanding of how compilers are constructed. Emphasis is placed on the application of formal language theory to compilers and on the actual methods, techniques and problems that arise in translation and code generation using modern high-level programming languages.

Prerequisite: (COMP215 AND COMP300)

Corequisite: None

COMP465 Data Base Management Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the various levels of organization of data base systems including the hardware level (state-of-art media, devices, channels, controllers), the physical representation of data, the logical organization of data and the overall structure of large scale information processing systems. A survey of commercial data management products. Applications to management planning and control are included.

Prerequisite: (COMP300)

Corequisite: None

COMP480 Special Problems

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An in-depth investigation of aspects of computer science. Topics to be determined prior to the semester in which the course is offered.

Prerequisite: (COMP300)

Corequisite: None

CRJS102 Introduction to Criminal Justice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history, organization, and functions of various components of the criminal justice system. Focuses on the interrelationships among law enforcement agencies, prosecution, courts, correctional processes and institutions, probation, parole, juvenile justice, and other officials and their agencies. Critical thinking is applied to the system and its practices.

Prerequisite: None

Corequisite: None

CRJS205 Drug Abuse

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the use and abuse of drugs in America. The history of such use and abuse, the pharmacology and legalization or criminalization of such drugs, the social response to drug use and abuse, effects of drugs on the body and the role of law enforcement are considered.

Prerequisite: (CRJS102) OR (CRJS102)

Corequisite: None

CRJS210 Diversity in Criminal Justice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Encompasses a critical examination of the issues and problems relating to the administration of justice in a culturally diverse society. Emphasis is placed on the study of gender, race, class, sexual orientation, and ethnicity and the respective challenges these diverse characteristics pose in the various agencies of the criminal justice system. Emphasis is also placed on the opportunities and challenges of providing criminal justice services within a multicultural society. Theoretical perspectives will be included.

Prerequisite: (CRJS102 AND SOCI101)

Corequisite: None

CRJS215 American Gangs: History, Identification and Interdiction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the social and cultural history of American gangs including the influence and relationship between national, regional and local adult and juvenile gangs. Includes evaluation of gang identification and membership with emphasis on their impact on crime. Emphasis is placed on growing concern within the criminal justice community of the influence and spread of youth gangs and growing hybridization and migration of gangs in terms of location, member diversity and organization.

Prerequisite: (CRJS102 AND SOCI101)

Corequisite: None

CRJS240 Introduction to Law Enforcement

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The philosophical and historical background, Constitutional limitations, objectives, and processes in the enforcement of law. The nature and responsibilities of law enforcement are discussed and evaluated, including police accountability, civil liability, and multicultural issues. Critical thinking and ethical decision making in law enforcement situations are developed through case analysis, exercises and simulations.

Prerequisite: (CRJS102 AND SOCI101)

Corequisite: None

CRJS260 Criminal Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on substantive criminal law. Elements of a crime; parties to a crime; types of offenses; and scope, purpose and definitions of criminal offenses are critically analyzed. The elements of creative problem solving are applied to problems in the field. There is an

emphasis on ethical decision making by participants in this part of the system. The general principles of substantive law are studied through the analysis of appeals court decisions.

Prerequisite: (CRJS102)

Corequisite: None

CRJS300 Forensic Criminology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide students with an in depth study of the concepts of profiling, behavioral analysis, and threat assessment. The course examines a variety of serious offenses such as serial murder, serial rape, school violence, workplace violence and child abduction. Emphasis will be placed upon the underlying psychological factors and societal stressors that contribute to the above events.

Prerequisite: (CRJS102)

Corequisite: None

CRJS305 Corrections

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis and critique of what the criminal justice system does with convicted persons. Also a consideration of what the system should do with convicted persons. Further, considers the long term implications of corrections policy and practice on individuals and on society.

Prerequisite: (CRJS102)

Corequisite: None

CRJS310 Criminal Investigation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the principles and procedures used in criminal investigation including problem solving and scientific approaches to solving crimes.

Prerequisite: (CRJS102 AND CRJS240)

Corequisite: None

CRJS360 Criminal Procedure

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers the procedures the criminal justice professional must use in implementing the criminal law. The course gives primary consideration to the Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments to the United States Constitution. The course considers the Incorporation Doctrine, search and seizure, warrant requirements, arrest, stop and frisk, the right to counsel, interrogation, identification procedures, entrapment, cruel and unusual punishment and related matters.

Prerequisite: (CRJS260)

Corequisite: None

CRJS425 Senior Seminar in Criminal Justice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is intended to help students consolidate their learning in criminal justice and related areas and prepare for the world of work. Major concepts from throughout the criminal justice program are reconsidered and integrated. Major emphases include integrating theory, research and the application of findings to understanding the functioning of various functions of the criminal justice system. The process of obtaining employment in the criminal justice system is also a major emphasis of this course.

Prerequisite: None

Corequisite: None

CRJS490 Criminal Justice Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of research methods used in criminal justice which includes quantitative and qualitative paradigms. Includes an evaluation of the scientific method; sampling; reliability; validity; and the relationship of statistics, theory, and research. Emphasis will be placed on the use of various types of research in the criminal justice discipline.

Prerequisite: (MATH107 AND SOCI302)

Corequisite: None

CRJS600 The Correctional System

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is a description and analysis of the correctional system with special emphasis on total institutions and their impact on clients and their lives. Special attention is given to the lives of clients in such systems and on their adaptations to such a way of living.

Prerequisite: None

Corequisite: None

CVED200 Introduction to Deliberative Public Learning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students are introduced to the theory and practice of deliberative citizen discourse in a democracy. The course links study of theory with participation in actual public forums. Principles of deliberative discourse are studied in relation to theories of democracy and then applied in public forums. Students become effective moderators in public deliberative forums and interpreters of results. This course also prepares students for more advanced study in the theory and practice of civic engagement and public scholarship. (Fulfills external experience general education)

Prerequisite: None

Corequisite: None

DANC100 Beginning Modern Technique

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Offering an overview of modern technique styles on the beginning level constitutes the core of this course. Students will develop an understanding and appreciation for dance as a performing art. Through classroom activities the student's experience, knowledge, and perspective of the creative process of dance will be enhanced. Examination of Pioneer Modern Dancers will increase physical understanding of concepts and objectives of the class. Writing skills will be developed in response to videos, class discussions, research, and live performances.

Prerequisite: None

Corequisite: None

DANC200 Intermediate Modern Technique

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops physical understanding of modern technique styles on the intermediate level with attention to the elements of dance - time, space, and energy. Designed to create a greater understanding and appreciation for dance as a performing art. Examination of pioneer modern dancers and post-modern figures to increase physical understanding of concepts and objectives of the class. Writing skills are developed in response to videos, class discussions, research, and live performances.

Prerequisite: None

Corequisite: None

DANC205 Intermediate Ballet Technique

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach intermediate skills in classical ballet technique, this course emphasizes a practical understanding of proper alignment, musicality, and performance energy. Studio time includes learning, refining, and strengthening these skills into longer movement combinations. Most classes are movement based. Examines the history, practice, and theory of ballet.

Prerequisite: None

Corequisite: None

DANC210 Dance Composition 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides practical experience in manipulating the tools of choreography, exploration of compositional devices, and development of solos and small group works through improvisation, problem-solving, and cooperative assignments. Visual skills are enhanced when critiquing dances.

Prerequisite: None

Corequisite: None

DANC300 Dance Integration for Elementary Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Gives an awareness and understanding of how to teach elementary curricular concepts through dance. Students use traditional educational theories as a base for developing lesson plans through interactive teaching methods utilizing the performing arts.

Prerequisite: None

Corequisite: None

DANC301 Advanced Ballet Technique

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Refinement of technical skills in Classical Ballet at the advanced level. Mastery of kinesthetic, expressive, and aesthetic principles of contemporary ballet at an advanced level. Emphasizes a practical understanding of proper alignment, musicality, and performance energy. Studio time includes learning, refining, and strengthening these skills through performance of advanced movement combinations. Most classes are movement based. Examines the history, practice, and theory of ballet.

Prerequisite: (DANC105 AND DANC205)

Corequisite: None

DANC302 Dance in Western Culture

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Through theoretical analysis and practical application this course examines the historical development of Western theatrical dance from European peasants to Renaissance Court dances to trends in the 21st Century. Socio-cultural influences and contributions of artists are investigated, including the religious, political, and performative functions of dance in Western Culture.

Prerequisite: None

Corequisite: None

DANC303 Advanced Modern Technique

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Refinement of technical skill in modern dance at the advanced level, including complex movement capabilities, rhythmic structure, spatial relationships, with emphasis on aesthetic and expressive qualities that lead to performance. Designed to create a greater understanding and appreciation for dance as a performing art and humanity. Writing skills are developed in response to videos, class discussions, research, and live performances.

Prerequisite: (DANC100 AND DANC200)

Corequisite: None

DRIV416 Intro to the Driving Task

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the vehicle operator's task within the highway transportation system. Attention will be given to facts, rules, regulations, and attitudes for good driving. It is recommended that the course be taken early in the process of developing the driver educator. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

DRIV417 Driver Educ: Curriculum & Method

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to and practical application of methods and materials of teaching driver education. Future teachers of driver education will be able to plan, teach and evaluate the four modes of driver education. Participants will provide classroom instruction combined with road training and the teaching of driving to beginners by means of a dual-controlled car. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

DRIV429 Psychology Accident Prevention

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Attempts to establish the relationship between psychology and accident causation. Students will examine human behavior as a factor in the frequency of accidents in a wide variety of situations. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

ECED100 Introduction to Early Childhood Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the historical, theoretical, and developmental foundations for young children, birth to 4th grade. While providing an orientation to early education of young children, emphasis will be on programs, current issues, families, community, and cultural diversity.

Prerequisite: None

Corequisite: None

ECED101 Cultures of Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the complex social and cultural factors that influence children's development and learning as well as the ethical guidelines that determine professional conduct and development.

Prerequisite: None

Corequisite: None

ECED119 First Year Seminar for Education Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements. This course reviews campus services, certification requirements, and provides students with an overview of teacher education at Lock Haven University.

Prerequisite: None

Corequisite: None

ECED150 Diversity in the Development of Infants, Toddlers and Young Children

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to offer an examination of the influence of culture, environment and context on development of infants, toddlers and young children across physical, cognitive and social/emotional domains of development.

Prerequisite: (PSYC111)

Corequisite: None

ECED200 Observing and Assessing Young Children

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to observing, documenting and assessing young children (birth-five years) using formal and informal assessment tools across all areas of development.

Prerequisite: None

Corequisite: None

ECED212 Language Development in Early Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a foundation of basic knowledge regarding language development in young children. Observation of and participation with young children are required.

Prerequisite: (ECED100 AND PSYC111)

Corequisite: None

ECED220 Emerging Mathematics: Children from Birth through Age 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address the acquisition of knowledge and skills related to the development of mathematics concepts for preprimary children.

Prerequisite: (ECED100)

Corequisite: None

ECED225 Beginning Literacy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces appropriate methods for helping young children acquire literacy skills. The focus of this course is to provide students with information specific to children from PreK through grade 1. Students will learn to integrate literature with multiple curricular areas, how to assess young children's literacy, how to write appropriate lesson or activity plans, and what literature is appropriate for young children.

Prerequisite: (ECED212)

Corequisite: None

ECED325 Assessment and Evaluation in Early Childhood Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address the acquisition of knowledge and skills related to the development, as well as the interpretation, of assessments used in Early Childhood classrooms.

Prerequisite: None

Corequisite: None

ECED331 Planning & Administering Early Childhood Programs: Fostering Partnerships w/Families&Communts

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the principles of effective program design and administration appropriate for infants to kindergarten and Head Start children. Students develop an early childhood program based on child development theory, educational practice and governmental regulations. In addition, selected aspects of program planning and administration are examined with an emphasis on fostering communication and collaboration with families and communities.

Prerequisite: None

Corequisite: None

ECED332 Developing Creative Expression

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This junior level course is designed to examine the content and methods available to facilitate children's expression through art, music and dramatic play within childcare, educational and academic settings.

Prerequisite: None

Corequisite: None

ECED340 Creating Healthy Environments for Infants and Toddlers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the content and methods of environments for infant and toddlers in caring, educational, academic and family/home and play settings.

Prerequisite: None

Corequisite: None

ECED415 Integrating Curriculum and Instruction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to assist the students in synthesizing theory and content from a variety of pre-professional courses through actual teaching or pre primary and primary grade children. Students plan, teach, and analyze segments of instruction under the supervision of college instructors in area school classrooms.

Prerequisite: None

Corequisite: None

ECED428 Student Teaching & Practicum Early Childhood 1

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

ECED429 Student Teaching & Practicum Early Childhood 2

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

ECED431 Science: Early Childhood Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This component of the Early Childhood Education Professional Semester is designed to examine the content and methods of science education for young children in care giving, educational and academic settings. Observation of and participation with young children are required.

Prerequisite: None

Corequisite: None

ECED432 Language Arts and Reading for Early Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the content and methods of language arts and reading for young children in an academic setting.

Prerequisite: None

Corequisite: None

ECED434 Guidance and Communication: Early Childhood Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This component of the Early Childhood Education Professional Semester is designed to provide the historic origins of the Early Childhood Education guidance tradition, its foundation in a variety of theories of human development, learn applied guidance techniques and communication skills that promote successful learning experiences, and become familiar with observation and assessment tools that provide essential information for the effective guidance of young children.

Prerequisite: None

Corequisite: None

ECED436 Social Studies for Early Childhood: Early Childhood Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the content and methods of social studies education for young children in pre-primary and primary level (K-4) settings. This course develops an understanding of the concepts and skills for effective instruction in all aspects of social studies for children through grade 4.

Prerequisite: None

Corequisite: None

ECED493 Student Teaching & Practicum Early Childhood 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Prerequisite: None

Corequisite: None

ECED494 Student Teaching & Practicum Early Childhood 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Prerequisite: None

Corequisite: None

ECED605 Advanced Child Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide graduate students with a review of frameworks for viewing diversity in development from infancy through middle childhood. These frameworks are then applied to key diversity factors shaping development. Students are provided with the opportunity to explore several of these factors in depth and to examine and analyze the implications for teaching and learning.

Prerequisite: None
Corequisite: None

ECED610 Childhood Play: Theory and Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Designed to provide graduate students with an in depth look at play theories and the importance of play in child development and learning.

Prerequisite: None
Corequisite: None

ECED615 Family, Community and Educational Collaboration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide graduate students with a review of frameworks for viewing educational collaboration from a family and community perspective. These two factors are explored in depth to examine and analyze their implications for teaching and learning.

Prerequisite: None
Corequisite: None

ECON101 Principles of Economics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to economic theory in terms of the American economic system: economic growth, national income and its distribution, markets and prices, economic instability, the public sector of the economy, and the relationship with the world economy. Critical evaluation of past and current economic policies in the U.S. Fulfills General Education Requirements.

Prerequisite: (MATH100) OR (MATH112) OR (MATH113)
Corequisite: None

ECON301 Economics of the Environment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of economic analysis to problems of the environment, such as air, water, and land pollution; natural resource depletion; and preservation of species and natural areas. Specific aspects will include externalities, measurement of costs and benefits, alternative abatement strategies, allocation of property rights, and theories of renewable and nonrenewable resources. Past and present U.S. and international environmental policies will be critiqued, and new directions explored.

Prerequisite: (ECON101)
Corequisite: None

ECON310 Intermediate Macroeconomics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intermediate study of economic aggregates with analysis of determinants of national income, production, and employment, as well as the theories of inflation and economic growth. Examines monetary, fiscal and income policies for achieving economic stability. Measurement of economic aggregates also considered.

Prerequisite: (ECON101)
Corequisite: None

ECON315 Intermediate Microeconomics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intermediate study of microeconomic theory designed to provide an understanding of the economic environment within which business operates and the interaction between business and the economy at large. Emphasis on economic behavior of individuals and firms, and the consequences of this behavior. Application of economic theory to significant problems.

Prerequisite: (ECON101)
Corequisite: None

ECON320 American Public Finance

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An application of economic principles to the problems of government spending, taxation, and public debt management. Growth and nature of governmental expenditures; local, state, and federal revenue systems; nature and economic effects of various types of taxes; the federal budget as an instrument of national economic policy; public debts and financial administration.

Prerequisite: (ECON101)

Corequisite: None

ECON328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

ECON330 Economic Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intermediate utilization of the tools of economic analysis for examining the models of economic growth and development. Theories applied to underdeveloped regions of the earth. Interdisciplinary nature includes study of political, sociological, historical, and technological factors in growth and development.

Prerequisite: (ECON101)

Corequisite: None

ECON335 Regional & Urban Economics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Sub-national area economic performance processes and issues. Analysis of economic activity in a spatial setting. The economics of location decisions and patterns, land use, urban structure, and regional development; inter-regional interaction and problems of locational change and adjustment; regional economic objectives, public and private policies; basic techniques of regional analysis.

Prerequisite: (ECON101)

Corequisite: None

ECON340 Money & Banking

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examination of the role of money and credit in the U.S. economy. Overview of financial instruments, markets, and intermediaries along with the evolution and regulation of the financial system. Attention is given to bank lending and the money supply process as controlled by the Federal Reserve System. Formulation of monetary policy is studied as are alternative monetary theories and international aspects of banking and finance.

Prerequisite: (ECON101)

Corequisite: None

ECON350 Comparative Economic Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Comparison of how different economic systems allocates scarce resources. The structure and operation of the market economy and the socialist centrally administered economy. Emphasis on comparison of capitalist systems of the world and of economic systems in transition from being centrally planned to market directed; the collapse of communism.

Prerequisite: (ECON101)

Corequisite: None

ECON355 International Trade & Finance

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The economic effects of trade among nations. Topics include but are not limited to trade theory determination of exchange rates, international monetary problems, trade barriers, international economic agencies and agreements, trade policies of developing nations, and the international economic policies of the United States.

Prerequisite: (ECON101)

Corequisite: None

ECON410 Econometrics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to empirical research in economics and the economic techniques used in forecasting.

Prerequisite: (ECON101 AND ECON310 AND ECON315 AND MATH107)

Corequisite: None

ECON415 Mathematical Economics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exposition of the mathematical structure of economic theories.

Prerequisite: (ECON101 AND ECON310 AND ECON315 AND MATH141)

Corequisite: None

ECON628 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

EDLD600 Educational Leadership

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A required course in the Educational Leadership program and/or elective in the Alternative Education program. It outlines the program's philosophy and ongoing assessment activities. It provides students with the opportunity to become familiar with the program mission, philosophy, goals and competencies. This course also provides an introduction to the theory and practice of educational administration.

Prerequisite: None

Corequisite: None

EDLD602 School Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses primarily on court cases and ethical issues related to the following topics: instruction programs, freedom of expression, search and seizure, student discipline, discrimination, privacy, and teacher dismissal.

Prerequisite: None

Corequisite: None

EDLD605 Curriculum and Program Evaluation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A required course in the Educational Leadership program and/or elective in the Alternative Education program. The course provides a history of evaluation, identifies the varied purposes of evaluation, and reviews various models of curriculum and program evaluation.

Prerequisite: None

Corequisite: None

EDLD607 Professional Development in Schools

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reviews the latest research available to educators about implementing professional development programs in their schools. Students will become familiar with how to design professional development programs. University partnerships, professional development schools, data-driven programming and standards are included as units of study in the course. The course also explores and analyzes critical issues in professional development.

Prerequisite: None

Corequisite: None

EDLD612 Instructional Strategies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides principals with a practical and theoretical overview of instructional strategies that are effective and used in classrooms today. The course will highlight scaffolding instruction, differentiated instruction, varied learning styles and multiple intelligences, standards-based instruction, Blooms' Taxonomy of cognitive development and writing across the curriculum.

Prerequisite: None

Corequisite: None

EDLD685 Supervision Leadership and Administration Issues - Advanced Field Experience

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Allows students to apply skills, knowledge, and dispositions to areas that enhance the performance of an administrator. The course will highlight staff development, data collection, analysis and evaluation, program development, parent involvement, curriculum development, and accountability. Students will complete a variety of considerable in-school/district experiences over the 15 week period; not less than 120 hours.

Prerequisite: None

Corequisite: None

EDTF200 Instructional Media

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

An introduction to the planning and utilizing resources for instructional message development and delivery. This hands-on course emphasizes the operation and utilization of computers and related technologies aimed at meeting the International Society for Technology in Education (ISTE) standards focusing on pre-service teacher education. Students develop basic teaching/learning skills through exploring classroom applications of recent technological innovations including the internet and digital imagery. Course is restricted to Early Childhood, Elementary, Health & Physical Education, and Special Education majors.

Prerequisite: None

Corequisite: None

EDTF205 Instructional Media for Secondary Education 1

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the planning and utilizing resources for instructional development and delivery. This hands-on course emphasizes the operation and utilization of computers and related technologies aimed at meeting the International Society for Technology in Education (ISTE) standards focusing on secondary level pre-service teacher education. Students develop basic teaching/learning skills through exploring classroom applications of recent technological innovations including the internet and digital imagery. Restricted to Block 1 secondary teacher majors.

Prerequisite: None

Corequisite: None

EDTF300 Educational Technology for Specialized Disciplines

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A professional level course addressing two important needs of educators: 1) a foundational understanding of educational technology; and 2) the underlying principles of teaching and learning, of the paradigm shift, and of using technology to facilitate learning. Emphasis focuses on developing skills in the following areas: personal and professional use of technologies, production of digital materials, implementing and managing technology in instructional environments, and recognizing the role of technology in student learning and success.

Prerequisite: None

Corequisite: None

EDTF301 Educational Technology for Secondary Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A professional level course addressing two important needs of educators: 1) a foundational understanding of educational technology; and 2) the underlying principles of teaching and learning, of the paradigm shift, and of using technology to facilitate learning. Emphasis focuses on developing skills in the following areas: personal and professional use of technologies, production of digital materials, implementing and managing technology in instructional environments, and recognizing the role of technology in student learning and success.

Prerequisite: None

Corequisite: None

EDTF302 School Law and Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the laws and policies that have shaped public education within the judicial system. Emphasis will be placed on ethics for teacher-educators. Both teacher and student rights and responsibilities will be explored. Special Education Law will be the focus when investigating programs, services, accountability, and assessment.

Prerequisite: None

Corequisite: None

EDTF310 Instructional Media for Secondary Education II

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

A pre-professional level course addressing the use of technology to facilitate learning. Emphasis focuses on developing skills in the teaching/learning process through the use of instructional design, production of digital materials, managing technology in instructional environments, and recognizing the role of technology in student learning. Course is restricted to Block 2 secondary teacher education majors.

Prerequisite: None

Corequisite: None

EDTF602 Global Perspectives in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of education in light of the global village concept. Focus is on psychosociological, economic, political, historical, and environmental forces that both shape and are shaped by education. Graduates will elevate their critical awareness of the education institution by examining similarities and differences among selected issues in nation states; formulate possible solutions to shared problems; and hone their decision-making skills.

Prerequisite: None

Corequisite: None

EDTL600 Introduction: Inquiry and Educational Change

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the Master of Education in Teaching and Learning and Alternative Education. In this course graduate students will be introduced to the program expectations, tools and objectives including the technologies utilized for program delivery and electronic portfolio development, online learning strategies, the National Board for Professional Teaching Standards, the National Educational Technology Standards for Teachers, and educational research.

Prerequisite: None

Corequisite: None

EDTL601 Teaching and Learning in an Information Age

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides graduate students with an understanding of the teaching/learning process in relation to the emergence of the "information age." Students will consider paradigm shifts in the roles of teacher, learner and technology. Students will compare and contrast the effectiveness of various technology types and how they impact the teaching/learning process. Students will develop technology enhanced learning experiences while developing technology skills reflective of the best practices and applications.

Prerequisite: None

Corequisite: None

EDTL603 Educational Assessment Strategies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will investigate the practical and theoretical issues involved in evaluating student performance, teacher performance and educational programs. The students enrolled in this course will examine a variety of assessment instruments and strategies and discuss the role (s) each has in the evaluation process. The course will enable students to plan, execute and interpret educational assessments.

Prerequisite: None

Corequisite: None

EDTL604 Designing Assessments Using Performance Standards

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to provide graduate students an understanding of and practice with the design and analysis of assessments and rubrics that can be employed in a standards-based classroom. Readings and activities are grounded in educational research and illustrated with meaningful classroom practices of teaching and learning in a standards-based environment.

Prerequisite: None

Corequisite: None

EDTL605 Critical Issues in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course serves to examine timely problems, trends and issues related to education from a multi-disciplinary perspective. The focus is on contemporary influences of change in education at various points across the delivery process. These include issues that come from federal or state decisions in policy and law which impact educational practice, those that are generated by the changing professional knowledge base regarding curriculum and methodology that define best practice, and those that occur at the initial point of education to learners as a function of district policy and teacher practice.

Prerequisite: None

Corequisite: None

EDTL606 Analysis of Teaching

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Utilizing the five core propositions of the National Board for Professional Teaching Standards and the associated discipline/grade level standards as a framework, graduate students explore, design, implement and document strategies to analyze the effectiveness of their teaching and professional development.

Prerequisite: None

Corequisite: None

EDTL607 Projects, Readings and Case Studies in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A course in the M.Ed. program that allows the student to choose a subject of interest in education and pursue a focused and self-directed review of the literature or creation of a project or case study.

Prerequisite: None

Corequisite: None

EDTL608 Education Reform

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An in-depth look at efforts to reform the education system in the United States. The course includes a historical overview of American education during the past 100 years; an analysis of reform efforts; contributions by various cultures, inside and outside of the United States to reform efforts; an overview of the process of reform; and, an exploration of current reform initiatives.

Prerequisite: None

Corequisite: None

EDTL609 Classroom Management and Control

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to promote student mastery of theory and practice related to classroom management. Students develop a repertoire of strategies to use for preventing and managing classroom discipline with all types of students and situations.

Prerequisite: None

Corequisite: None

EDTL610 Fundamentals of Educational Leadership

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Fundamentals of Educational Leadership is designed for teachers (or others) who are interested in developing their knowledge and skills in the area of leadership studies. Topics covered include contemporary leadership theory, gender and ethnic issues in leadership, assessment of personal leadership socio-emotional (SEQ) skill profiles, informal and formal school leadership, assessment of leadership cultures in schools, classroom leadership, teaching leadership skills to students, project and team leadership, transformational and change leadership, exemplary school leadership and the development of a personal leadership portfolio.

Prerequisite: None
Corequisite: None

EDTL611 Character Education: Developing Students to Become Productive Citizens

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the need for developing students' ability to make good decisions based on reasoned principles and an approach to incorporate this skill as a part of the regular curriculum. Graduate students enrolled in this course will trace the history of moral education and evaluate various approaches to improve the moral behavior of grade school learners. In addition, the graduate students will choose one area of the curriculum and devise a long-range plan that will enhance the character development of their student learners.

Prerequisite: None
Corequisite: None

EDTL615 Alternative Education: An Introduction to Theory and Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to be an introduction to theories and practices in Alternative Education. An array of topics is explored to bring research, theories and practices together in a meaningful format. The inquiry nature of this course will serve as a building block for issues in other courses and the capstone research project. Emphasis is placed upon the practical application of theories in the classroom, best practices and characteristics of effective programs.

Prerequisite: None
Corequisite: None

EDTL617 Grant Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the process of writing grants in human services and education. Students will explore and analyze the various components of a grant, the process of developing and writing proposals, research techniques that produce results, the budgeting process, and how to develop a unified proposal. Students will write a grant proposal as a final product for the course.

Prerequisite: None
Corequisite: None

EDTL618 Understanding the Role of Cognition and Social Skills in the Classroom

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to promote student mastery of theory and practice related to cognitive and social skills training. Specifically, students will explore brain-based learning, cognitive skills research, social skills research, and the practical uses of these concepts with students in the classroom.

Prerequisite: None
Corequisite: None

EDTL620 Introduction to Deliberative Public Learning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course introduces students to the theory and practice of deliberative citizen discourse in a democracy. The course links study of theory with participation in actual public forums. Principles of deliberative discourse are studied in relation to theories of democracy and then applied in public forums. Research on public learning and classroom learning are examined, especially in relation to standards-based outcomes assessment. Students will become effective moderators in public deliberative forums and interpreters of results. This course also prepares students for more advanced study of civic engagement and public scholarship and its application in the middle and secondary school settings.

Prerequisite: None
Corequisite: None

EDTL625 Investigating Curriculum Issues in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students may select one issue from the following: curriculum mapping, designing assessment using performance standards, differentiated instruction, brain-based learning. In the alternative, they may propose another issue for instructor approval. Through investigation, analysis, and discussion, students investigate and formulate criteria necessary for the implementation of best practices within the classroom.

Prerequisite: None
Corequisite: None

EDTL627 Learning Theory and Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

In this course, graduate students will study classical and contemporary theories of learning, their contrasts and connections, and their impact on teaching and curriculum design. These studies, along with the completion of applied projects, will provide a basis for students to enrich their own instructional practice.

Prerequisite: None
Corequisite: None

EDTL632 Supervision of Student Teachers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theories and strategies of supervision for cooperating teachers at all levels in the direction of student teaching experiences. Includes the study of delivery systems in the school and classroom which relate to the teacher-student relationship for improving learning capacity, such as planning with specific objectives, skillfully conducted conferences, assessment techniques for analyzing teaching, resolution of teaching and learning problems, understanding role relationships, and exploration of value systems.

Prerequisite: None
Corequisite: None

EDTL634 Research Methods in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of modern research methodology and theory through readings, lecture, discussions, and exercises. Students will develop skills in the scientific collection and evaluation of data, which will be applied towards solving and evaluating educational and other problems. The focus is on making students more effective consumers of research obtained from both professional journals and the popular media as well as the application of research methodology in a classroom setting.

Prerequisite: None
Corequisite: None

EDTL641 School Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will emphasize the legal position of the teacher in Pennsylvania and the United States with regard to the organization and administration of school districts, teacher certification, teacher liability, and other legal principles affecting the teacher, principal, pupil, and school district. Opportunity will be provided to use legal source materials and libraries. Significant court cases will be studied and discussed.

Prerequisite: None
Corequisite: None

EDTL650 Comparative and International Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will examine the dynamics of education in light of the global village concept. Focus will be on the social, economic, political, cultural, and environmental forces that shape or that can be shaped by education. Similarities and differences among selected educational systems will be explored. Research will be extracted from diverse data bases. Current technology will be utilized to connect graduate students with educators outside of the United States to discuss issues, trends, similarities, and differences; to formulate solutions to shared problems; and to foster positive changes.

Prerequisite: None
Corequisite: None

EDTL680 Internship 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the first part of a two-tiered internship sequence for actively employed emergency certified teachers. This course provides a specific population of graduate students with opportunities to develop and enhance critical and reflective practices positively impacting student learning. (

Prerequisite: None

Corequisite: None

EDTL681 Internship 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The second and culminating teaching internship experience for actively employed emergency certified teachers, Internship 2 extends and scaffolds upon the objectives, activities, and experiences of Internship 1. Students have the opportunity to refine instructional strategies and the principles of critical and reflective practice explored during the actual internship experience. This course provides a specific population of graduate students with further opportunities to develop and enhance critical and reflective practices related to positively impacting student learning. (

Prerequisite: None

Corequisite: None

EDTL685 Performance Based Assessment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In this course students will explore various means of performance-based assessment such as portfolio development, observation and other performance-based evaluation techniques. The effective use of technology will be included. Students will develop rubrics and practice skills in scoring them.

Prerequisite: None

Corequisite: None

EDTL690 Current Philosophies of Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the philosophies of education that have had an impact on education today. The works of educational philosophies and critiques of their positions will be read and discussed. The implications for today's educational experiences will be discussed.

Prerequisite: None

Corequisite: None

EDTL692 Reflective Practice and Action Research 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The first of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: None

Corequisite: None

EDTL694 Reflective Practice and Action Research 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The second of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: (EDTL692) OR (ALTE692)

Corequisite: None

EDTL695 Advanced Field Experience

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The culminating course in the M.Ed. graduate program that allows the graduate student to apply knowledge and demonstrate skills gained in their professions. This course is restricted to graduate students and is a core requirement in the M.Ed. Teaching and Learning and Alternative Education programs.

Prerequisite: None

Corequisite: None

EDUC105 Introduction to Elem Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with a basic understanding of the field of elementary education through experiences in elementary schools for a minimum of 25 hours. The philosophical model of education at Lock Haven University will be examined in depth. Students will examine the

role of the classroom teacher in society and their own willingness to take on that role. In addition students will be introduced to e-mail, the internet and electronic library research. Students will be expected to do extensive writing and speaking in the course.

Prerequisite: None

Corequisite: None

EDUC202 Children's Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the student to major literary genre, bibliographical tools, story-telling techniques, censorship, and early field experiences.

Prerequisite: (HONR111) OR (ENGL100)

Corequisite: None

EDUC204 The Elementary School

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the elementary school in its traditional form, as it is changing today and in light of changes expected in the future. Emphasis is placed on factors responsible for the changes taking place--school organization and administration, scientific advances in our knowledge of learning and behavior, evolving roles of teachers, emerging technologies and patterns of instruction, and recent developments in American society. Includes in-school experiences directly related to the course. Required of all Elementary Education majors; taken during the first four semesters of the program.

Prerequisite: (EDUC105)

Corequisite: None

EDUC212 Classroom Management in the Middle and Secondary School Setting

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Examines behaviors that characterize this age group and helps teachers understand why adolescents behave as they do. Included are a variety of teaching methods and activities to stimulate and reinforce desirable behavior, effectively respond to undesirable behavior, and extinguish inappropriate behavior.

Prerequisite: None

Corequisite: None

EDUC220 Sophomore Seminar for Elementary Education Majors

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements for the Developing Portfolio into a required course and to support student achievement of the Education program requirements.

Prerequisite: None

Corequisite: None

EDUC300 Foundations of American Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will critically examine the history, philosophy, ethics, and theory of education. They will analyze past and current practices as well as their effect on curriculum and teaching methods. Teacher candidates will be expected to continually develop their understanding of multiculturalism and their skills in lesson planning, writing, and communication. They will refine their ability to evaluate the use of technology and WEB-based information.

Prerequisite: EDUC105 AND EDUC204 AND PSYC102

Corequisite: None

EDUC330 Classroom Management in the Elementary and Middle School Setting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Offers a holistic view beginning with a variety of methods and activities for helping teachers build positive learning environments (a community of learners), improve relations in the classroom (a broader community), and cope with challenging behaviors and special abilities. The teacher is viewed as a model and facilitator, a supervisor of instruction which is called to fashion environments that invite exploration, inquiry, and positive self-concepts by drawing from research in psychology and sociology.

Prerequisite: EDUC204

Corequisite: None

EDUC335 Assessment and Differentiation in the Elementary Classroom

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation into the design and evaluation of assessments for student performance in the elementary classroom.

Prerequisite: None

Corequisite: None

EDUC340 Classroom Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Classroom teachers are struggling to cope with an increasing number of student behavioral problems. This course will present strategies designed to stop discipline problems before they start. Building a positive learning environment, techniques for improving teacher-pupil relationships, and coping with disruptive behaviors will be studied. Based on sound, carefully researched theory, the course will offer a variety of methods and activities designed to help teachers implement management strategies.

Prerequisite: None

Corequisite: None

EDUC352 Computer Applications in the Classroom

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops background and skills for using computers in educational settings. Participants learn to use the computer to assist in the achievement of educational goals and to evaluate and author educational computer programs. Participants experience the computer as a tutor, a tool, and a tutee. Standards for excellence in courseware are studied. Participants use BASIC, Logo, and authoring languages.

Prerequisite: None

Corequisite: None

EDUC472 Literacy and Language Arts: Elementary Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Taken only as a part of the Elementary Professional Semester. Designed to place emphasis on mastering methods, strategies and techniques and on using materials appropriately for a balanced literacy program. The course focuses on instruction and evaluation of writing, reading, speaking, and listening abilities plus the integration of these developing abilities across curriculums, standards and instructional designs. Current literacy policies, research based practices, and educational curriculums are stressed. This course is open to students who meet requirements for enrollment in the Elementary Professional Semester.

Prerequisite: READ300

Corequisite: None

EDUC473 Social Studies Methods: Elementary Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Taken only as part of the Elementary Professional Semester. Development of concepts and skills for effective instruction in all aspects of the Social Studies. Interdisciplinary unit studies are stressed. Students prepare lesson and unit plans, work in teams, present demonstration lessons to peers and evaluate instructional materials. Students learn how to access reference literature and teaching materials, locate experts and other resource personnel for classroom activities as well as for activities outside of the classroom.

Prerequisite: None

Corequisite: None

EDUC474 Science Methods: Elementary Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students practice techniques for teaching science to elementary children. The use of discovery learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed; students create hands-on files, review and react in writing to science readings, create a science project and present it to children, and students prepare lessons to present to peers and children from the local schools. The use of manipulatives is required. Students study for, prepare and teach a coordinated set of activities in environmental studies including field trips to the University's conference center or other outdoor facilities.

Prerequisite: None

Corequisite: None

EDUC475 Teaching of Mathematics in the Elementary School: Elementary Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students learn techniques for teaching mathematics to elementary students according to the National Council of Teachers of Mathematics (NCTM) Process Standards and the PA State Math Standards. Emphasis is given to appropriate progression from the concrete to the abstract in all learning. Use of manipulatives is required. The use of strategies to make content accessible to ALL students is a priority. Much time is spent cultivating a positive attitude toward mathematics. Discovery learning, interdisciplinary study and the use of technology are woven into the course. Scheduled concurrently with subject matter methods and Clinical Field Experience.

Prerequisite: None

Corequisite: None

EDUC476 Creating Classroom Environments: Elementary Professional Semester

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides specific information and strategies for organizing, planning and implementing instruction in a classroom and creating a positive, productive atmosphere for learning. Questioning, listening and management techniques are stressed. Methods for helping learners become self-disciplined are emphasized and techniques for dealing with unacceptable behavior are considered in depth. Since this course is usually taken concurrently with other courses in teaching methods and with a required field experience course, all topics are consciously integrated with those of the other courses. In addition to mastering the various techniques considered, students are expected to develop a philosophical basis for creating an ordered classroom.

Prerequisite: None

Corequisite: None

EDUC477 Clinical Field Experiences: Elementary Professional Semester

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

This laboratory course assists the student in synthesizing theory and content from a variety of a pre-professional courses and requires students to put this theory and content into practice during actual teaching of elementary school children. Students plan, teach and analyze segments of instruction under the supervision of college instructors in area school classrooms.

Prerequisite: None

Corequisite: None

EDUC478 Intro Educational Computing: Elementary Professional Semester

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides basic skills in the uses of microcomputers in educational settings and background about computer technology. Courseware in various instructional subject areas is examined and evaluated. Several modes for Computer-Aided Learning are demonstrated and experienced. Students receive an introduction to computer terminology, system components, operation, general uses of computers and resulting implications for society.

Prerequisite: None

Corequisite: None

EDUC493 Student Teaching and Professional Practicum: Elementary 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

EDUC494 Student Teaching and Professional Practicum: Elementary 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

ELET110 Devices 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to the structure and function of diodes, transistors, and related devices and their applications in power supplies, and in switching and amplifier circuits. Circuit elements will be characterized and modeled. The balance of four hours laboratory and two hours lecture emphasizes this course's technical orientation. Circuits using these elements will be constructed, modeled, and tested.

Prerequisite: None

Corequisite: None

ELML119 First Year Seminar for Elementary and Middle Level Education

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to provide an overview of elementary and middle level education and to outline program requirements to support student achievement within the Elementary and Middle Level Education Program. The students will be required to observe/participate in the schools for 20 hours in addition to class hours.

Prerequisite: None

Corequisite: None

ELML210 Learning Theory for Middle Level Learners

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to give the student a more in-depth understanding of the learning process for elementary and middle level learners. Essential components of the course focus on the learner, the teacher, the patterns of instruction, the curriculum, and the development of instructional materials. The students are required to participate in the schools 20 hours in addition to class hours.

Prerequisite: (PSYC103)

Corequisite: None

ELML310 Assessment and Differentiation in the 4-8 Classroom

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation into the design and evaluation of assessments for student performance in the elementary/middle level classroom. Differentiated instruction and assessment will be addressed for middle level learners including English Language Learners (ELL). Ten hours of observation will be used to view middle level adapted assessment practices include PA Alternate System of Assessment (PASA) administration in addition to class.

Prerequisite: PSYC201 PSYC317

Corequisite: None

ELML410 Science Methods I

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

For preprofessional educators to practice the techniques of teaching science. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Sixteen participation hours are required in addition to class time.

Prerequisite: None

Corequisite: None

ELML412 Science Methods II

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

For preprofessional educators to practice the techniques of teaching science. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Students will prepare lessons to present to peers and children in the local schools. A demonstrated understanding of science manipulatives is required. Thirty-two participation hours are required in addition to class time.

Prerequisite: None

Corequisite: None

ELML414 Science Methods III

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

For preprofessional educators to practice the techniques of teaching science, including a working understanding of the 5-E Model. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science

programs are reviewed. Students will prepare lessons to present to peers and children in the local schools. A demonstrated understanding of science manipulatives is required. Forty-eight participation hours are required in addition to class time.

Prerequisite: None

Corequisite: None

ENGL090 College Writing Skills

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive practice in critical reading skills and forms of college writing. (For students whose SAT-verbal or Essay score is less than 401, or permission of instructor.) Course is not a remedial course; credits count toward graduation as elective credits.

Prerequisite: None

Corequisite: None

ENGL100 Composition

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the basic principles of effective English written communication. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

ENGL119 First Year Seminar for English Major Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the Lock Haven University Teacher Education Conceptual Framework and national standards for foreign language and English. The course guides students through the Stage I teacher education requirements and early field experience tasks, and addresses topics taught in generic freshman seminars.

Prerequisite: None

Corequisite: None

ENGL205 Introduction to Literary Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the methods and theories of literary analysis. The course covers how to write about literature, how to conduct literary research, the history of the book, and approaches to literary theory.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL206 Methods of Teaching English 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first course in a two-course English teaching and learning methods sequence, this class is an introduction to professional attitudes and discipline-specific pedagogical skills necessary to implement effective classroom instruction and educational technology. Emphasis is on theory, methods, materials, media, and strategies for teaching English Language Arts in the secondary setting and for Pennsylvania certification. The course includes field experiences and practice teaching.

Prerequisite: PSYC103

Corequisite: None

ENGL220 World Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of world literature.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL225 Core Texts in the Western Tradition

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to classical mythology and the Bible that prepares students to understand allusions to these works in modern literature.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL230 British Literature Before 1800

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A comprehensive survey of British literature from the Anglo-Saxon beginnings to the end of the 18th century.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL231 British Literature After 1800

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive survey of 19th and 20th century British Literature.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL235 Literature for Adolescents & Young Adults

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A pre-professional study of young-adult literature designed for teachers, librarians, and others using literature with young people. The course includes surveying suitable texts, using them in secondary schools, using text-sets on universal themes, pairing young-adult literature with classics, using literature as biblio-therapy, and listening, viewing, reading, writing, talking about literature. Attention is also given to censorship and the history of adolescent literature.

Prerequisite: None

Corequisite: None

ENGL237 Creative Nonfiction Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop that teaches how to use the techniques of fiction writing in the writing of nonfiction.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL100 AND ENGL220) OR (HONR111 AND HONR112)

Corequisite: None

ENGL242 American Literature After the Civil War

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of selected American authors from the Civil War to the present, with some emphasis upon the development of major literary trends. More emphasis upon selections than upon historical and biographical information.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL264 Fiction Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teaches the writing of short fiction through a balance of lectures, readings, writing exercises and the traditional workshop.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL100 AND ENGL220) OR (HONR111 AND HONR112)

Corequisite: None

ENGL266 Drama Workshop: Playwriting 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop in the writing of plays in which students participate in discussions, pursue independent writing projects, and meet with the instructor for individual consultation.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL268 Poetry Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop in the writing of poetry in which students study and discuss published poems and apply similar literary techniques to their own work, and participate in workshop discussions, pursue independent writing projects, and evaluate and discuss the work of fellow students, and meet with the instructor for individual consultation.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL100 AND ENGL220) OR (HONR111 AND HONR112)

Corequisite: None

ENGL280 Intro Study of Language

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Surveys historical and comparative linguistics, psycholinguistics, etymology, phonology, morphology, syntax and semantics. Special attention is paid to the history of the English language, usage, literacy, and nonstandard varieties of English.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL312 Secondary Education 2: English

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

The second in a sequence of early field experiences designed to provide student an opportunity to observe and participate in several diverse school settings. Extends and applies the theoretical base presented in Methods 1, as students develop and refine the professional attitudes and discipline-specific pedagogical skills necessary to implement effective literacy instruction.

Prerequisite: None

Corequisite: None

ENGL315 Composition Usage & Editing Tech

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the techniques of evaluation of expository and argumentative prose and of procedures for editing such writing. Considerable attention will be specifically focused on usage and the way it influences the effectiveness of prose writing. Usage is defined as Pooley uses it, namely "the choice of words, phrases, idioms, and syntax in the expression of ideas in speech or writing."

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach to literature, with emphasis on close textual analysis and an exploration of the relationship between literature and the historical or social contexts. Texts might be drawn from American, British, or world literature, and could include poetry, prose, drama, or nonfiction. Topics might include, among others: images of women, representations of the American West, medical themes in literature, novels about war, domestic fiction, or literary realism.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL336 Shakespeare

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of William Shakespeare's major works, including comedies, tragedies, histories, and sonnets.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL220) OR (HONR112)

Corequisite: None

ENGL357 Advanced Composition, Rhetoric and Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of the history of ideas about rhetoric and the effective use of language and images. The course focuses on practical applications for composing, critiquing, and teaching written, visual, and oral texts.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL360 Technical Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Practical experience in communicating scientific and technical material to a variety of audiences through clear, concise, and accurate writing..

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL400 Advanced Topics in British Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive study of a theme, genre, issue, or period in British literature.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL402 Advanced Topics in American Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive study of a theme, genre, issue, or period in American literature.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL404 Advanced Topics in World Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive study of a theme, genre, issue, or period in world literature.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

ENGL405 Grammars of English

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An analysis of English grammar from the perspectives of traditional grammar and transformational generative grammar. Primary attention will be given to understanding English morphology and syntax, grammar concepts, and evidence and arguments for correctness in usage.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL220) OR (ENGL230) OR (ENGL231) OR (ENGL240) OR (ENGL242)

Corequisite: None

ENGL408 Advanced Topics in Creative Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced craft lessons and workshop in fiction, poetry, drama, screenwriting, and creative nonfiction.

Prerequisite: (ENGL264) OR (ENGL266) OR (ENGL268) OR (ENGL237)

Corequisite: None

ENGL415 Student Teaching and Practicum Secondary 1: English

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

ENGL416 Student Teaching and Practicum Secondary 2: English

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

ENGL435 Major British Writers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the major works of from one to three major British writers for an in-depth study. In addition to a study of the primary texts, the course may also include an examination of relevant historical, biographical, and critical materials.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL220) OR (ENGL230) OR (ENGL231) OR (ENGL240) OR (ENGL242) OR (HONR112)

Corequisite: None

ENGL493 Student Teaching and Practicum 1 Secondary Education English

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the capstone experience for pre-service teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

ENGL494 Student Teaching and Practicum 2 Secondary Education English

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the capstone experience for pre-service teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

ENGL602 Topics in Adolescent Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A professional study of young adult literature designed for teachers, librarians, and others who use literature in dealing with adolescents and who desire to strengthen their expertise. In addition to a critical survey of young adult literature, consideration is given to advanced techniques for using these materials in middle, junior, and senior high schools and solving problems regarding their use, particularly questions about appropriateness and censorship.

Prerequisite: None

Corequisite: None

ENGL608 Topics in Creative Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced writing class involving upper-level craft lessons and workshops in fiction, poetry, drama, screenwriting, and creative nonfiction.

Prerequisite: None

Corequisite: None

ENGL628 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A thematic or topical approach to literature, with emphasis on close textual analysis and an exploration of the relationship between literature and the historical or social contexts. Texts might be drawn from American, British, or world literature, and could include poetry, prose, drama, or nonfiction. Topics might include, among others: images of women, representations of the American West, medical themes in literature, novels about war, domestic fiction, or literary realism.

Prerequisite: None

Corequisite: None

ENGL635 Major British Writers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the major works of from one to three major British writers for an in-depth study. In addition to a study of the primary texts, the course may also include an examination of relevant historical, biographical, and critical materials.

Prerequisite: None

Corequisite: None

ENVT101 Introduction to Environmental Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the historical and contemporary problems and dilemmas in environmental studies, their scientific bases, sociological implications, ethical dimensions, and avenues for constructive response.

Prerequisite: None

Corequisite: None

FILM328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to cinema as an art form. The seminar will screen outstanding films of the past and present, discuss and write about the films, and read screenplays and critical studies. Principal objective of the course is to increase students' understanding and appreciation of film.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

FREN101 French 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The fundamentals of pronunciation, vocabulary, and patterns of expression. Oral and written practice intended to develop the skills of speaking, reading, writing, and listening to French.

Prerequisite: None

Corequisite: None

FREN102 French 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The fundamentals of pronunciation, vocabulary, and patterns of expression. Oral and written practice intended to develop the skills of speaking, reading, writing, and listening to French.

Prerequisite: None

Corequisite: None

FREN201 French 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of fundamentals, together with continued vocabulary development, more complete construction, and more advanced oral and written exercises.

Prerequisite: None

Corequisite: None

FREN202 French 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of fundamentals, together with continued vocabulary development, more complete construction, and more advanced oral and written exercises.

Prerequisite: None

Corequisite: None

FREN203 French Civilization 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first semester examines modern France, emphasizing cultural traits, patterns of daily living, and current issues. The second semester follows the development of France from its earliest beginnings to the present, and traces its outstanding achievements in art, literature, architecture, science, etc.

Prerequisite: None

Corequisite: None

FREN204 French Civilization 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The first semester examines modern France, emphasizing cultural traits, patterns of daily living, and current issues. The second semester follows the development of France from its earliest beginnings to the present, and traces its outstanding achievements in art, literature, architecture, science, etc.

Prerequisite: None

Corequisite: None

FREN301 French Comp & Conversation 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In the first semester, extensive vocabulary development by reading and discussion of situational materials.

Prerequisite: None

Corequisite: None

FREN303 French Literature 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from the main works of French literature from the early Middle Ages to the present. Discussion of the characteristics of each work and of each literary movement. Critical readings. In this and subsequent literature courses, it is assumed that the student has the ability to read French with considerable ease, to follow lectures in the language, and to participate freely in discussions.

Prerequisite: None

Corequisite: None

FREN304 French Literature 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from the main works of French literature from the early Middle Ages to the present. Discussion of the characteristics of each work and of each literary movement. Critical readings. In this and subsequent literature courses, it is assumed that the student has the ability to read French with considerable ease, to follow lectures in the language, and to participate freely in discussions.

Prerequisite: None

Corequisite: None

FREN306 Current French Periodicals

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reading and discussion of the latest French newspapers and magazines, coupled with the study of contemporary France. Attention will be given to recent developments in French idiom and vocabulary, including "Franglais". Current tapes of French news broadcasts will help develop listening comprehension.

Prerequisite: None

Corequisite: None

FREN310 Advanced French Grammar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intensive study of French, providing review of basic grammar as well as presentation of more advanced topics not treated in French I-IV. Translation practice and structure drills will focus on problem areas arising from particular differences in English and French language structure.

Prerequisite: None

Corequisite: None

FREN328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of major films produced by leading French directors since the 1960s. Films will be studied as expressions of French culture and related to the special circumstances of French life, society and history that they reflect. Films will be discussed both in general aesthetic terms and in terms of specifically French values and specifically French way of life. Special attention will also be devoted to the differences between French and American filmmaking. Films are presented with English substitutes; no knowledge of French is necessary.

Prerequisite: None

Corequisite: None

GEOG100 Physical Geography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the physical geographical elements of the world. The earth's principal spheres (atmosphere, lithosphere, hydrosphere and biosphere) are explored through time and space as they respond to change. Major areas of study are the water cycle and budget, global soil systems, natural vegetation zones, climatic regions, earth dynamics, and ecological energetics.

Prerequisite: None

Corequisite: None

GEOG110 General Climatology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course provides an introduction to the basic fundamentals of general climatology. The basic components of climate and weather are introduced. Climate classifications and their geographic distribution are carefully explained and mapped. The interactions of human and biotic activity with weather phenomena and climate types are identified, examined, and studied. Laboratory exercises are coordinated so as to introduce students to the scientific method of weather data collection and weather mapping.

Prerequisite: None

Corequisite: None

GEOG180 Urban Geography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The course provides an introduction to cities as the artificial home of modern people. Urbanization is currently one of the principal physical, cultural, economic, social and political problems facing the world. Populations are rapidly changing from predominantly rural to urban in their distribution. The modern city frees the poor and the oppressed minorities from rural biases only to introduce them to the societal ills of urban slums. Through use of models students come to appreciate the social physics of urban function, growth and morphology. An appreciation of the city and its intricacies is developed. Future possibilities are discussed and explained.

Prerequisite: None

Corequisite: None

GEOG212 Geography Developing World

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A general introduction to the cultural and physical features of the developing regions of the world. These areas are sometimes referred to as the Third World. Following examination of the physical and cultural geography, the regional geography of the developing world will be studied. Features of the developed and developing regions of the world will be identified, compared and contrasted. Development problems and potentials will be considered for the areas of urbanization, industrialization and modernization.

Prerequisite: None

Corequisite: None

GEOG214 Geography Developed World

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A general introduction to the physical and cultural geography of the developed regions of the world. An introduction to the physical and human elements of the environment is followed by an in-depth examination of the major developed regions of the world. Issues of industrialization, international trade and technological development are set in their geographic environments and examined.

Prerequisite: None

Corequisite: None

GEOG220 Cartography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to maps, cartographic techniques and map production. The basics of map reading and map making will be introduced. Students will be introduced to aerial photo interpretation and remote sensing. Basic programs in computer will be introduced and used.

Prerequisite: None

Corequisite: None

GEOG305 Conservation Natural Resources

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the conservation ideas from an optimistic viewpoint. Basic earth materials must be employed or converted to sustain our material culture. The basic resources are investigated and discussed. Major areas of study are water, minerals, soils, energy, forests, wildlife, pollution, and environmental quality.

Prerequisite: None

Corequisite: None

GEOG315 Political Geography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is an in-depth study of how geography has influenced political phenomena throughout history. Political processes and environmental interaction at various levels of the political hierarchy are examined. Present day political problems are viewed in their aerial context.

Prerequisite: None

Corequisite: None

GEOG328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Uses a thematic and topical approach to examine issues in geography such as ethnic conflict, regional integration and separatism, regional development, sustainable development, poverty and uneven development, environmental degradation, and overpopulation (to be determined by the professor). Particular emphasis is placed on historical, political, and economic forces as they relate to contemporary issues associated with globalization.

Prerequisite: None

Corequisite: None

GEOG401 Special Problems

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4 sh]

Individual research under the guidance of the Geography staff. For advanced students in Geography.

Prerequisite: None

Corequisite: None

GEOG430 Urban & Regional Planning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Urban and Regional Planning is a means for systematically anticipating and achieving adjustments in the physical environment of a city consistent with social and economic trends and sound principles of urban environmental design and management. Therefore, it involves a continual process of deriving, organizing, and presenting a broad and comprehensive program for urban development and renewal. Land use planning will be considered as a means to fulfill local objectives of social, economic, and physical well-being, considering both immediate needs and those of the foreseeable future.

Prerequisite: (GEOG180)

Corequisite: None

GEOG440 Economic Geography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This course in Economic Geography emphasizes the need for universal control of the spatially distributed natural resources. Economic Geography can be regarded as a science concerned with the rational development, and testing of theories that explain and predict the spatial distribution and location of various characteristics on the surface of the earth. These characteristics are related to the consumption, production, and exchange of goods and services. The scientific approach to the analysis of this spatial distribution and its interrelationships involves two aspects, which are equally important. The first is the collection of facts or data, and the second is the synthesis of these facts into meaningful theories of great interest to economic geographers in the quantitative analysis of spatial distributions to discern the presence and form of patterns.

Prerequisite: None

Corequisite: None

GEOG445 Geography of Latin America

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A systematic, conceptual, methodological framework is devised as a basis to view the various regions. Included is the survey of Mexico, countries of Central American, major countries and areas of the West Indies, and all the South American countries. Emphasis is placed upon regional comparisons. The relations of Latin American countries among themselves and the rest of the world are stressed.

Prerequisite: None

Corequisite: None

GEOS101 Earth Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to Earth-system processes in the context of astronomy, meteorology, geology, and oceanography. Examines the Earth's relationship to the Sun, Moon, and planets in the solar system. The Earth's major processes, including the hydrologic cycle, the rock cycle, plate tectonics, global wind circulation, ocean circulation, global climatic phenomena, and human-induced changes in the environment are examined through lectures and hands-on laboratory investigations.

Prerequisite: None

Corequisite: None

GEOS120 Oceanography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive study of major components of oceans, including the origin of evolution of ocean floors, energy and mineral resources of oceans, chemical constituents and reactions in seawater, air-sea interactions, marine organisms and the relationships between these organisms and the environments of oceans. Ocean-related environmental concerns, including beach erosion, wetland loss, sea-level fluctuations, and point sources and non-point sources of pollution are discussed. (This course is required for majors in Secondary Education/Earth and Space Science, Secondary Education/General Science, and Biology/Marine Biology. Therefore they will receive preference for registering for the course. A required four-day field trip to Wallops Island, VA for which the students have an out of pocket expense of \$100 at the field station, plus meal expenses on the trip to and from the Marine Science consortium station.)

Prerequisite: None

Corequisite: None

GEOS131 Principles of Geology II

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to gain an appreciation of the deepness of geologic time and the vastness of space and to develop an understanding of the geologic and biologic processes through which the Earth and life on Earth evolved over geologic time. Students acquire hands-on experience on the use of scientific equipment and mapping tools in the field and in laboratory settings. Applications of stratigraphic principles to interpret Earth's history and the trend in evolution of life are emphasized.

Prerequisite: (GEOS130) OR (GEOS110)

Corequisite: None

GEOS213 Introduction to Geographic Information Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to geographic information systems (GIS) with emphasis on capturing, storing, editing, querying, displaying, and analyzing geographically referenced data. Lecture and laboratory materials are designed to provide students with hands-on experience on real-world applications of GIS in their respective fields.

Prerequisite: None

Corequisite: None

GEOS215 Environmental Geology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will traverse the spectrum of applied geology focusing upon its relation to human activities. Included among topics are water availability; geologic hazards such as earth quakes, landslides, and land subsidence; mineral and energy resources; engineering geology, waste disposal and pollution; land-use planning; coasts and coastal management; and medical and legal aspects of geology.

Prerequisite: (GEOS110) OR (GEOS130)

Corequisite: None

GEOS230 Geomorphology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of landforms and the factors involved in their formation including geologic processes, composition, structure, and climate. The laboratory emphasizes the recognition of various landforms using topographic and aerial photographs.

Prerequisite: (GEOS110) OR (GEOS130)

Corequisite: None

GEOS260 Geology Field Trip

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Guided field trips focusing upon various areas of geologic interest. Successive trips have different emphases. Pre-trip meeting required. Participants should expect to incur expenses for meals and lodging.

Prerequisite: (GEOS130) OR (GEOS110)

Corequisite: None

GEOS301 Invertebrate Paleontology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to the study of invertebrate fossils including: system of classification, types of fossil preservation, nomenclature, characteristic structures, ecology and evolution of the paleontologically important invertebrate phyla.

Prerequisite: (GEOS210) OR (BIOL240) OR (GEOS131)

Corequisite: None

GEOS305 Mineralogy and Petrology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to the origin, occurrence, crystallography, and chemical and physical properties of geologically important minerals. Includes a study of the classification and interpretation of igneous and metamorphic rocks.

Prerequisite: (GEOS110) OR (GEOS130)

Corequisite: None

GEOS313 Advanced Geographic Information Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Deals with advanced topics in geographic information systems (GIS), including spatial reference data, geometric transformation, raster data analyses, terrain mapping, viewsheds and watersheds, spacial interpolation, geocoding, dynamic segmentation, path analyses, geostatistics, mobile GIS, and GIS models and modeling. Lecture and laboratory exercises are designed to provide students with hands-on experience with real-world applications of GIS in solving problems in diverse fields.

Prerequisite: (BIOL213) OR (GEOS213)

Corequisite: None

GEOS315 Sedimentology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of sedimentary materials, processes, depositional environments, and the products of sedimentation. Laboratories focus upon collection, analysis, and presentation of field data and the description and interpretation of both consolidated and unconsolidated sedimentary materials applying various petrologic and petrographic techniques.

Prerequisite: (GEOS210) OR (GEOS131)

Corequisite: None

GEOS360 Hydrogeology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A course that emphasizes practical hydrogeologic principles, stressing interactions between geology and both surface and underground water. Topics include occurrence, production, and management of groundwater, water quality, flooding and flood control, and sources of information for the practicing hydrogeologist.

Prerequisite: (GEOS110 AND MATH141) OR (GEOS130 AND MATH141)

Corequisite: None

GEOS361 Aqueous Environmental Geochemistry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An upper-level course designed to help students develop in-depth knowledge of geochemical processes and factors controlling chemical composition and chemical reactions that impact the quality of both surface water and groundwater in natural and anthropogenically disturbed/perturbed geological systems.

Prerequisite: (CHEM121 AND GEOS110) OR (CHEM121 AND GEOS130)

Corequisite: None

GEOS415 Stratigraphy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The principles of lithostratigraphy and biostratigraphy form the core of this course. Geochronology and the recently developed techniques of seismic, magnetic, and isotopic stratigraphy supplement those classical principles. Laboratories emphasize the field identification and interpretation of vertical and lateral relationships of sedimentary sequences.

Prerequisite: (GEOS315)

Corequisite: None

GEOS420 Geology of Energy & Mineral Resources

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Geologic occurrence and methods of locating, mining, evaluating, and processing fossil fuels and industrial and ore minerals. Geology of major, worldwide fuel and mineral deposits and environmental problems associated with their exploitation.

Prerequisite: (GEOS221) OR (GEOS305)

Corequisite: None

GEOS430 Structural Geology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The constant movements of lithospheric plates relative to one another throughout the immensity of geologic time account for the regional and local displacement and deformation of the Earth's outer layers. These deformational processes along with the changes in the size and shape of the coherent rock masses and the internal arrangement of their constituent elements are the focus of this area of geological investigation.

Prerequisite: (GEOS210) OR (GEOS131)

Corequisite: None

GEOS450 Geophysics and Tectonics

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Geophysical methods used to study the Earth and other planetary bodies, including geophysical foundations of plate-tectonic theory. The course includes geophysical techniques used in mineral-resource exploration, engineering, and characterization of waste-disposal sites.

Prerequisite: (GEOS210) OR (GEOS131)

Corequisite: None

GEOS451 Coastal Environmental Oceanography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced topics in coastal geomorphology and environmental issues pertinent to coastal settings, including human impacts on coastal landforms, shoreline erosion, wetland loss, sea-level fluctuations, nutrients in estuaries, metals in bays, and climate change. Lecture, field trips, and laboratory exercises are designed to provide students with hands-on experience with field and laboratory equipment used to solve real-world problems in diverse coastal settings.

Prerequisite: (GEOS120) OR (GEOS130)

Corequisite: None

GEOS490 Capstone Research Project

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Students engage in an intensive independent research project related to their major concentration that will culminate in a research paper and presentation based on data collected and interpreted using scientific methods.

Prerequisite: None

Corequisite: None

GEOS628 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course looks at how scientists search for knowledge and try to gain an understanding of natural phenomena. Students explore the roles science and technology play in human activities both locally and globally. Specific topics vary and are based upon the expertise and interest of the faculty member responsible for teaching the course that semester.

Prerequisite: None

Corequisite: None

GERM102 German 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the fundamentals of German grammar and syntax, with special attention to pronunciation, reading, speaking, listening and writing of simple sentences and prose selections.

Prerequisite: None

Corequisite: None

GERM201 German 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of the fundamentals of German language and pronunciation; reading of short German prose works illustrating aspects of style; development of vocabulary and linguistic fluency.

Prerequisite: None

Corequisite: None

GERM202 German 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of the fundamentals of German language and pronunciation; reading of short German prose works illustrating aspects of style; development of vocabulary and linguistic fluency.

Prerequisite: None

Corequisite: None

GERM203 German Culture 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of significant aspects of German culture, including current events and movements. Special attention is given to the outstanding persons, events and forces in art, music, theater, philosophy, politics, education, and religion, with a view towards understanding the German ethos.

Prerequisite: None

Corequisite: None

GERM204 German Culture 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of significant aspects of German culture, including current events and movements. Special attention is given to the outstanding persons, events and forces in art, music, theater, philosophy, politics, education, and religion, with a view towards understanding the German ethos.

Prerequisite: None

Corequisite: None

GERM301 German Comp & Conversation 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Advanced course to develop fluency in speaking and writing. Classroom time is devoted mainly to conversation about everyday life. Compositions will be written on contemporary topics. Grammar is treated as necessary.

Prerequisite: None

Corequisite: None

GERM302 German Comp & Conversation 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced course to develop fluency in speaking and writing. Classroom time is devoted mainly to conversation about everyday life. Compositions will be written on contemporary topics. Grammar is treated as necessary.

Prerequisite: None

Corequisite: None

GERM303 German Literature 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from selected authors representative of the main periods of modern literature. Lectures on literary history and the lives of the more important writers supplement the discussion of works being studied. Students are expected to develop and express critical opinions.

Prerequisite: None

Corequisite: None

GERM304 German Literature 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from selected authors representative of the main periods of modern literature. Lectures on literary history and the lives of the more important writers supplement the discussion of works being studied. Students are expected to develop and express critical opinions.

Prerequisite: None

Corequisite: None

GERM306 Advanced German Grammar 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thorough review of the grammatical structure of the German language. Students learn to communicate correctly and effectively in German by means of extensive oral and written exercises that focus on specific areas of grammar.

Prerequisite: None

Corequisite: None

GERM328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of German film since 1970. Films will be studied as expressions of German culture and of a specifically German view of the world. Films are shown with English subtitles; no knowledge of German is necessary.

Prerequisite: None

Corequisite: None

GERM402 German Prose 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of German prose fiction since the eighteenth century. Students will study such modern writers as Hermann Hesse, Franz Kafka, Heinrich Boll, Thomas Mann, and Max Frisch. Literary works are studied both as products of their age and culture and for their own thematic interest. Changes in style, technique, and worldview are examined in historical perspective.

Prerequisite: None

Corequisite: None

HIST101 World History 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A global survey of the evolution of societies and civilizations from prehistory to the early modern era. It covers the history of Europe and the Mediterranean basin, but also Africa, Asia and the Americas. Recurrent themes are the environment, community, politics, economy, technology, belief systems and culture. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None

Corequisite: None

HIST102 World History 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of world history from the early modern period to the present. Its central focus is the gradual integration of diverse populations as global contact expanded during the period in question. Students consider the construction of historical periodization from a multi-cultural perspective while examining a variety of themes that illuminate the interaction of cultures through conflict and cooperation. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None
Corequisite: None

HIST111 Global History 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A global survey of the evolution of societies and civilizations from prehistory to the early modern era. It covers the history of Europe and the Mediterranean basin, but also Africa, Asia and the Americas. Recurrent themes are the environment, community, politics, economy, technology, belief systems and culture. Fulfills general education requirement in world history. Restricted to History and Secondary Education, Social Studies majors

Prerequisite: None
Corequisite: None

HIST112 Global History 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of world history from the early modern period to the present. Its central focus is the gradual integration of diverse populations as global contact expanded during the period in question. Students will consider the construction of historical periodization from a multi-cultural perspective while examining a variety of themes that illuminate the interaction of cultures through conflict and cooperation. Fulfills general education requirement in world history. Restricted to History and Secondary Education, Social Studies majors

Prerequisite: None
Corequisite: None

HIST150 American History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A rapid survey of political, economic, diplomatic, social, and cultural developments in the United States from the beginning of the colonial period to the present. This course does not fulfill the general education requirement in history.

Prerequisite: None
Corequisite: None

HIST200 Historical Thinking and Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to historical methods, with emphasis upon sources, interpretation, presentation and scholarly debate. Thematic content (i.e., geographic region, era, or subject) and/or case studies to be determined by the instructor.

Prerequisite: (ENGL100) OR (HONR111)
Corequisite: None

HIST202 History of the United States 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of U.S. history since 1865, emphasizing shifting political, social and economic developments, particularly the transformation of the U.S. from an agricultural to an industrial nation and the impact on the U.S. of its rise as a world power.

Prerequisite: None
Corequisite: None

HIST203 Introduction to Public History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introductory survey to the field of public history giving special attention to the history, philosophy, and purposes of applied history. A key theme is the professional responsibilities of historians in preserving and interpreting the past through historical agencies, archives, museums and sites of local history.

Prerequisite: None
Corequisite: None

HIST205 History of the United States Labor Movement

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the American labor movement from early national beginnings to the present placed within the framework of general historical development. It seeks to explore the world of both the wage earner and the organizations created to achieve common goals. Emphasis is focused on the growth of American unionism and the development of collective bargaining.

Prerequisite: None

Corequisite: None

HIST210 Colonial America

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of American life from the beginnings of English settlement to 1789, with emphasis upon the development of political, economic and cultural institutions.

Prerequisite: None

Corequisite: None

HIST230 Appalachian Regional History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the unique history of Appalachia, a region that runs from Alabama through New York and includes Central and Western Pennsylvania. Students will scrutinize and discuss primary sources and historical analyses as they consider the construction of the notion of "Appalachia." The course will introduce students to patterns of settlement and exploitation of resources, discuss variations within the region, and examine Appalachia's history within both a national and an international context.

Prerequisite: None

Corequisite: None

HIST245 History of Pennsylvania

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Pennsylvania from its colonial beginnings to the present; special attention to the political, economic, and social factors which have shaped the past; the Commonwealth's impact upon the national scene.

Prerequisite: None

Corequisite: None

HIST300 Early American Republic

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of various themes in United States history from the end of the Revolution through the era of Andrew Jackson (1783-1845). Topics to be covered include the emergence of political institutions, economic growth, the struggle to create a functional foreign policy, westward expansion, the rise of sectional tensions, and the changing characteristics of a developing society.

Prerequisite: None

Corequisite: None

HIST301 Medieval History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the creation and evolution of Europe from the division of Rome by the fifth century to the division of Christianity after the fifteenth. The course will concentrate on the development of European political, social, religious, and intellectual structures, paying special attention to the synthesis of Mediterranean, Germanic, Islamic, and Christian contributions.

Prerequisite: None

Corequisite: None

HIST302 Civil War & Reconstruction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the American Civil War era, 1845-1877. Topics to be emphasized include the ante-bellum South; the origins of the Civil War; the war in its military, political, diplomatic, social and economic aspects; and reconstruction, South and North.

Prerequisite: None

Corequisite: None

HIST305 Renaissance & Reformation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Key intellectual developments of the Renaissance including secularism, humanism, and individualism. Analysis of early Protestant movements. Ideas and influences of Protestant and Catholic leaders including Luther, Calvin, Loyola, and Pope Paul III. The Commercial Revolution.

Prerequisite: None

Corequisite: None

HIST306 History of the American Frontier

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the westward movement and its influence upon the American development. Social and economic aspects of the frontier experience will be emphasized.

Prerequisite: None

Corequisite: None

HIST307 Diplomatic History of US

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Foreign relations from the beginning of our national history to the present: the growth and influence of a policy of "isolation"; the creation and development of the Monroe Doctrine; the emergence of the United States as a world power; the problems incident to the assumption of global responsibilities.

Prerequisite: None

Corequisite: None

HIST310 French Revolution & Napoleon

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The Old Regime, the Enlightenment, and the causes of the French Revolution. Revolutionary events of the decade 1789-1799 and military, legal, economic, and political aspects of the Napoleonic era. The emergence of the bourgeoisie.

Prerequisite: None

Corequisite: None

HIST311 International Business History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of selected topics in the development of modern business cultures. The expansion of the industrial, world economy will serve as the general chronological framework, with major units devoted to: family firms and trading diasporas, chartered and joint stock companies, banking and insurance, commercial adaptations of new technologies, the creation of mass markets, "business imperialism," the multinational corporation, and business cultures within late industrializers and "emerging" markets.

Prerequisite: None

Corequisite: None

HIST312 US in Prosperity & Depression, 1918-1941

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An examination of the culture, economics and politics of the U.S. between the two world wars. Topics include the impact of World War I, the emergence of a mass consumer culture in the 1920's, the Great Depression and its effects on U.S. society, the rise of the modern labor movement, the New Deal and the origins of the welfare state, and the legacy of these developments for contemporary America.

Prerequisite: None

Corequisite: None

HIST313 Nationalism in Asia

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the rise of modern nationalism in India, China, Japan and Southeast Asia in the nineteenth and twentieth century. Emphasis will be on a thematic, theoretical and comparative approach highlighting the similarities and differences in society and culture of each of these regions and their response to nationalism.

Prerequisite: None

Corequisite: None

HIST314 Oral History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop that introduces students to the theory, method, and practice of oral history. Students read and discuss theory, develop a research agenda, conduct field interviews, present results of a transcribed interview, and reflect on the relationship between theory and practice. (Fulfills external experience general education)

Prerequisite: None

Corequisite: None

HIST315 Social History of Europe Since 1750

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An interdisciplinary survey of the pattern of social history of modern Europe with particular reference to the interaction of institutions and struggles of social classes. Use is made of social sciences auxiliary to the study of history, in particular economics, demography and sociology.

Prerequisite: None

Corequisite: None

HIST322 History of Modern China

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the political, social, economic, and intellectual evolution of China from approximately 1800 to present. Special emphasis will be placed upon Western imperialism in China, the Revolution of 1911, the rise of the Nationalist and Communist Parties, the Chinese Civil War, the People's Republic, and post-Mao China. No previous exposure to China is presumed.

Prerequisite: None

Corequisite: None

HIST324 Environmental History of Asia

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the ecological landscape of Asia from the earliest times with a focus on the diverse aspects of its environmental history. Addresses human migrations, changes in land use patterns, water management systems, forests, grazing lands, and climatic change, in the context of oceanic and overland interactions among the inter-communicating regions within Asia, and between Asia and the rest of the World.

Prerequisite: None

Corequisite: None

HIST327 History of Modern Japan

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the evolution of Japan from an isolated island nation to a world power. Deals with the political, economic, social, military and intellectual history of Japan from 1600 to the present. Particular emphasis will be placed on the Takugawa Bakafu, the Meiji Restoration, the rise of Militarism and Nationalism, the Russo-Japanese War, the occupation of China, World War II, the Reconstruction, and the modern Japanese economy. No previous exposure to Japan is presumed.

Prerequisite: None

Corequisite: None

HIST328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

HIST332 History of the Islamic World to 1798

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines selected topics in Islamic history before 1798, introducing students not only to important personages, events, and themes, but also to historical interpretation and method. The course will be divided into four units, outlining the expansion of the Islamic world from the early community at Mecca to the zenith of the Ottoman Empire; specifically, the religious and political foundations of Islam, conversion and expansion, Islamic civilization, and the great empires.

Prerequisite: None

Corequisite: None

HIST333 History of the Islamic World Since 1798

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An examination of selected topics of the modern Islamic history, introducing students not only to important personages, events, and themes, but also to historical interpretation and method. The course will be divided into seven units from the pivotal 1790's to the present; specifically: decline and renewal in the late eighteenth century, the age of European colonialism, nineteenth and twentieth century nationalism, the politics of oil and the fundamentalist challenge.

Prerequisite: None

Corequisite: None

HIST335 History of Modern Russia

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Major developments of Russian history since 1815. Emphasis upon the decline of Tsarism, rise of revolutionary movements, World War I and the Russian Revolution of 1917. Soviet ideology, foreign and domestic policies from Lenin to the present.

Prerequisite: None

Corequisite: None

HIST338 History and Preservation of American Architecture

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of American architectural history as material evidence of the country's social, cultural, economic and technological development. Examines the meaning, uses, and changes of selected architectural forms addressing a broad array of structures, monuments, and landscapes. Emphasizes the principles and methods of public history, especially historic preservation. Includes attention to professional careers and ongoing projects in historic preservation.

Prerequisite: (HIST200) OR (HIST203)

Corequisite: None

HIST342 History Modern Europe 1815-1914

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A chronological and topical approach. Evaluation of major political, economic, social and cultural trends, with particular emphasis on industrialization and economic and social changes, development of the power of the nation-state, imperialism, and the origins of World War I.

Prerequisite: None

Corequisite: None

HIST345 Military History of US

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the American military experience from colonial times to the present. Topics include the development of military organizations, institutions, practices, and traditions, and the origins and evolution of past wars in their military, diplomatic, political, economic, and social dimensions.

Prerequisite: None

Corequisite: None

HIST347 The Ancient Mediterranean

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the evolution of ancient Mediterranean societies and cultures from the prehistory of the area until the decline of the Roman Empire, the rise of Islam, and the end of the Mediterranean as a cultural unit. Focuses on major social, political, cultural, and religious institutions and practices of ancient Mesopotamia, Egypt, Palestine, Greece, and Rome.

Prerequisite: None
Corequisite: None

HIST358 History of Modern South Asia and Indian Ocean

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the student with a basic understanding of the history and civilization of India, Pakistan and Bangladesh, from South Asia's earliest history up to the present. Special emphasis will be placed on the Classical Age of Indian History, the great Mughal Empire, the British Empire, and independent South Asia. No previous exposure to South Asia is presumed.

Prerequisite: None
Corequisite: None

HIST362 History of Africa to 1800

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of selected topics in pre-colonial African history. with the aim of introducing students not only to important personages, events and themes, but also to historical interpretation and method. The course will be divided into six units ranging from prehistory to the eighteenth century, specifically: food and society, ancient civilizations, human migration, state formation, Islamic society, and the transatlantic slave trade.

Prerequisite: None
Corequisite: None

HIST363 History of Africa Since 1800

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of modern African history from 1800 to the present, with the aim of analyzing contemporary issues from an historical perspective. In particular, the course will revolve around the question of whether the colonial period was simply a brief, superficial phase in African history, or a time of upheaval and transformation. Emphasis will be placed on African agriculture, rural communities, industrialization, urbanization, and colonial and contemporary politics.

Prerequisite: None
Corequisite: None

HIST366 History of Modern Southeast Asia

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Traces the evolution of Southeast Asia from its early modern history as a focal region for European and American colonialism and conquest, to the emergence of the contemporary independent states. Emphasis will be placed on Dutch colonialism in Indonesia, the British in Burma and Malaysia, America in the Philippines, French Indochina, the Vietnam War, and Southeast Asia since 1975.

Prerequisite: None
Corequisite: None

HIST367 Colonial Latin American History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Surveys the history of the vast area known as Latin America from Pre-Columbian times to the wars of independence of the early nineteenth century. Examines the major Pre-Columbian civilizations, the early encounter with Iberians, processes of conquest and transformation that resulted in the creation of unique American societies. Focuses on the development of the economic, political, social, cultural and religious institutions of this region.

Prerequisite: None
Corequisite: None

HIST370 History of Latin America

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of Latin America from the period of discovery to the present. The relation of economic, social and cultural factors to the various political units. The influence of relations with Europe and the U.S.

Prerequisite: None
Corequisite: None

HIST372 Historical Perspectives on Appalachian Health Care

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will study the development of health care systems and issues in Appalachia, a region that contains central Pennsylvania. This course will provide students with an opportunity to scrutinize and discuss primary sources and historical analyses that address the following issues: identification of the region and recognition of the unique health needs of its inhabitants; the development of the medical profession and its relationship to other health care providers; and evaluation of the effectiveness of the traditional medical system in Appalachia.

Prerequisite: None

Corequisite: None

HIST377 Modern Latin American History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the history of Latin America from the Wars of Independence (1820s) to the present. Through lecture, readings, discussion and various media, students will analyze the economic and political development of Latin America, its authoritarian and revolutionary past and its recent transitions to democracy. The role of popular culture in national development and identity as well as relations with the U.S. will also be examined.

Prerequisite: (HIST***)

Corequisite: None

HIST385 History of Modern South Africa

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of modern South African political, social and economic problems within an historical context. Thus, the course will survey the development of colonial political institutions, industries, social class and popular movements with the aim of better defining the protests and reforms of recent years. Topics covered will include: pre-colonial Southern African societies, Dutch colonization and Afrikaner society, the mineral revolution and industrialization, rural impoverishment and labor migration, colonial labor and segregation policies, labor unions, African nationalism, and the rise and apparent fall of the apartheid regime.

Prerequisite: None

Corequisite: None

HIST390 Contemporary World Problems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of the historical background and significance of several major contemporary problems. Issues treated will vary from year to year in response to the changing world scene. Typical problems are the Arab-Israeli conflict, arms limitation, northern Ireland, the status of Taiwan, among others.

Prerequisite: None

Corequisite: None

HIST395 Historiography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the nature of historical inquiry and historical knowledge through a study of the principles of historical methodology. A survey of the history of historical writing with emphasis upon the critical historical scholarship of the last two centuries.

Prerequisite: None

Corequisite: None

HIST480 Capstone Research Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A research seminar, with emphasis upon historical sources, interpretation, presentation and scholarly debate. Thematic focus (i.e., era or theme) to be determined by the instructor, according to the following criteria: 1) global in scope, 2) local history application, 3) subject of historical debate.

Prerequisite: (HIST200 AND HIST3**)

Corequisite: None

HIST605 The Renaissance & Reformation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Key intellectual developments of the Renaissance including secularism, humanism, and individualism. Analysis of early Protestant movements. Ideas and influences of Protestant and Catholic leaders including Luther, Calvin, Loyola, and Pope Paul III. The Commercial Revolution.

Prerequisite: None

Corequisite: None

HIST608 History of Ideas in the United States

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the major trends in American religious, political, social and economic thought from the colonial period to the present.

Prerequisite: None

Corequisite: None

HIST618 US Women's History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the experiences of women in the United States from colonial times to the present. The course examines the way that U.S. history has been shaped by gender, that is, the impact of gender on women's economic status and social roles. It also explores the diversity of experiences of women of different classes and ethnic backgrounds. Finally, the course examines women's contributions to U.S. culture or politics.

Prerequisite: None

Corequisite: None

HIST622 History of Modern China

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the political, social, economic, and intellectual evolution of China from approximately 1800 to present. Special emphasis will be placed upon Western imperialism in China, the Revolution of 1911, the rise of the Nationalist and Communist Parties, the Chinese Civil War, the People's Republic, and post-Mao China. No previous exposure to China is presumed.

Prerequisite: None

Corequisite: None

HIST628 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

HIST666 History of Modern Southeast Asia

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the evolution of Southeast Asia from its early modern history as a focal region for European and American colonialism and conquest, to the emergence of the contemporary independent states. Emphasis will be placed on Dutch colonialism in Indonesia, the British in Burma and Malaysia, America in the Philippines, French Indochina, the Vietnam War, and Southeast Asia since 1975.

Prerequisite: None

Corequisite: None

HIST672 Historical Perspectives on Appalachian Health Care

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

HIST690 Contemporary World Problems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of the historical background and significance of several major contemporary problems. Issues treated will vary from year to year in response to the changing world scene. Typical problems are the Arab-Israeli conflict, arms limitation, northern Ireland, the status of Taiwan, among others.

Prerequisite: None

Corequisite: None

HLTH100 Medical Terminology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introductory study of medical language including basic word structure, medical prefixes and suffixes, and document organization. It is designed to help students interpret medical terms as used in medical practice.

Prerequisite: None

Corequisite: None

HLTH102 Orientation to Health Science

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Explores career options and graduate or professional school opportunities for Health Science majors. Class activities primarily consist of presentations by allied health professionals regarding job requirements, prerequisite education and related matters.

Prerequisite: None

Corequisite: None

HLTH104 Foundations of Health Education

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

Introduces students to the profession of health education. Emphasis is placed on the history of the profession; major determinants of health status; the contributions of the behavioral sciences, education and public health; and health behavior change theory. Students will analyze the roles and responsibilities of health educators.

Prerequisite: None

Corequisite: None

HLTH105 Introduction to Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introductory survey of basic health issues. The emphasis is on the development of health literacy skills to enhance students' efficacy in reaching and maintaining a lifestyle conducive to health and wellness. A foundation of health content will be covered to serve as a basis for further study of contemporary health issues.

Prerequisite: None

Corequisite: None

HLTH106 Athletic Training Technique

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This course is designed to introduce the potential athletic training student to the basic techniques and procedures that are used in the athletic training profession. This course will train the student to be certified in professional rescuer CPR and AED use. Emphasis will be placed on skills pertaining to injury prevention and acute care.

Prerequisite: None

Corequisite: None

HLTH119 First Year Student Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the culture and mission of the university within the context of an academic discipline. Explores the purpose of college education and provides an opportunity to become engaged with the academic discipline. Students are introduced to basic learning and study skills in a content area. Through class discussion of readings, students engage in active learning. Common co-curricular activities and the incorporation of a peer mentor component facilitate connection with fellow students and faculty. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

HLTH122 Essentials of Human Anatomy and Physiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to cover topics of normal structure and function of the human body at an introductory level to prepare students for advanced study. The laboratory component includes practical application of course content using the scientific method. Students will explore integumentary; skeletal; muscular; nervous; cardiovascular; respiratory; digestion and metabolism; urinary; lymphatic and immune; endocrine and reproductive systems.

Prerequisite: None

Corequisite: None

HLTH128 Anatomy and Physiology 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce students to a two-course sequence involving the study of the normal structure and function of the human body. Students explore the sensory organs, integumentary, skeletal, muscular, and nervous systems.

Prerequisite: None

Corequisite: None

HLTH129 Anatomy and Physiology 1 Lab

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A lab experience that will introduce students to an in-depth anatomical and physiological analysis of the skeletal, joint, integument, muscular, nervous, and organ systems. Disarticulated skeletons, organ models, and various audiovisual aids will aid in student comprehension.

Prerequisite: None

Corequisite: None

HLTH130 Anatomy and Physiology 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The second of a two-course sequence to introduce students to a study of the normal structure and function of the human body. Students explore the endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems.

Prerequisite: (HLTH128) OR (HLTH151)

Corequisite: None

HLTH131 Anatomy and Physiology 2 Lab

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

A laboratory experience that will introduce students an in-depth anatomical and physiological analysis of the cardiovascular, respiratory, digestive, urinary, and reproductive systems. Physiological exercises, organ models and various audiovisual aids will be used to aid in student comprehension.

Prerequisite: None

Corequisite: None

HLTH200 Introduction to Disease

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide health science students with a background of information that is needed for future advanced studies in specific allied health professions. Course topics include medical terminology and documentation, basic evaluation skills, the inflammatory and healing processes, and an introduction to the diseases that occur within the body's systems.

Prerequisite: (HLTH151 AND HLTH251) OR (HLTH115 AND HLTH120) OR (HLTH128 AND HLTH130) OR (HLTH130 AND HLTH151) OR (HLTH128 AND HLTH251)

Corequisite: None

HLTH202 Care and Prevention of Athletic Injuries

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of injury recognition, preventative measures, evaluation, and treatment techniques used in the management of athletic injuries.

Prerequisite: (HLTH151) OR (HLTH128)

Corequisite: None

HLTH208 Stress Management and Life Skills for Health Promotion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The interrelationship of physical, mental, and psychological aspects of overall health. The emphasis is on the development of health literacy skills to enhance students' efficacy in researching and maintaining a lifestyle conducive to health and wellness. Students will be guided through identifying and analyzing how their personal lifestyles impact their health. Specific emphasis on preventive measures of disease, development of a stress management plan, and lifelong skills to promote every aspect of health.

Prerequisite: None

Corequisite: None

HLTH230 Evidence-Based Medicine

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to introduce the concepts of evidence-based medicine. Students develop the skills to generate an appropriate clinical question, search and critically evaluate the relevant literature, and make a clinical recommendation based on the findings.

Prerequisite: None

Corequisite: None

HLTH260 General Medical Conditions in Athletic Training

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to allow students to develop knowledge and skill in the assessment of general medical conditions and illnesses that occur in the physically active individual which includes an analysis of illness transmission, pathology, prevention, recognition, treatment and referral.

Prerequisite: None

Corequisite: None

HLTH301 CPR and Emergency Care

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to provide the student with the skills necessary to respond to and evaluate both life-threatening and nonlife-threatening situations. Emphasis is placed on the evaluation and management of medical emergencies or trauma injuries through the use of scenarios and demonstration of proper first aid techniques. Students receive training and certification in CPR, first aid, and blood pressure measurement.

Prerequisite: None

Corequisite: None

HLTH304 Administration and Organization of Athletic Training 1

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to examine in-depth the various issues, policies and procedures involved with the administration of athletic training in the traditional and nontraditional settings. An intensive evaluation of facility organization and design, Standard Operating Procedures and Emergency Action Plans, legal issues, budgeting, health care services, organizations and documents that affect the profession of athletic training, and performance enhancement methods, as well as drug testing procedures are investigated.

Prerequisite: None

Corequisite: None

HLTH305 Intro to Biomechanics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Increases the health science major's understanding of human movement and provides the foundation for critical analysis of physical activity and exercise. The approach includes the use of both quantitative and qualitative problems and applications that are designed to illustrate biomechanical principles.

Prerequisite: (HLTH128 AND HLTH129)

Corequisite: None

HLTH307 Cultural Aspects of Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An exploration of race, ethnicity and culture as constructs of health. The course is designed to enhance cultural awareness and improve cultural competence when working with diverse populations within the United States.

Prerequisite: None
Corequisite: None

HLTH310 CPR & First Aid Instructor Training

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Students will become prepared to teach CPR and first aid skills to others. Emphasis is placed on the role of the instructor to supervise skill practice sessions. Detailed training with the CPR manikins is given. Upon successful completion of the course, students will receive American Red Cross instructor certification in CPR and first aid.

Prerequisite: (HLTH301)
Corequisite: None

HLTH315 Consumer Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to offer useful information concerning the selection of health services and products for enlightened consumers.

Prerequisite: None
Corequisite: None

HLTH320 Drug Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provide students with current, accurate, and documented information about drug abuse in society. Special attention will be given to prevention, treatment, and drug education programs.

Prerequisite: (HLTH105) OR (HLTH154) OR (HLTH104)
Corequisite: None

HLTH325 Death Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Thought provoking questions and learning activities will help the student personally examine selected death-related issues and will serve as a guide in developing a death education curriculum in the secondary, middle or elementary school setting.

Prerequisite: None
Corequisite: None

HLTH330 School Health Programs

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Intended for students interested in health education. It includes the information and skills for planning and implementing policies and programs aligned with the Coordinated School Health Program. The course meets the combined standards for the National Commission on Accreditation in Teacher Education (NCATE) and Society for Public Health Education-American Association for Health Education (SABPAC).

Prerequisite: None
Corequisite: None

HLTH332 Psychological Aspects of Human Injury and Illness

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expose students to the psychological aspect of injury, illness, and rehabilitation. Students are exposed to the growing body of literature that indicates psychological issues can have a significant impact on the quality of rehabilitation and one's life. Students learn about the various psychological factors that influence the rehabilitation process including, motivation, confidence, anxiety, and pain. Goal setting techniques, relaxation training, mental imagery, social support techniques, pain management techniques, and referral processes are also discussed.

Prerequisite: (PSYC100)
Corequisite: None

HLTH334 Teaching of Nutrition and Consumer Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address the basic elements of nutrition and consumer health for the health and physical education major.

Prerequisite: (HLTH104)

Corequisite: None

HLTH336 Teaching Drug Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with current, accurate, and documented information concerning drug abuse in society. Special attention will be given to drug education curriculum K-12, special school programs, community drug education programs, dysfunctional family problems related to drug abuse, and teaching strategies.

Prerequisite: (HLTH104 AND HLTH151 AND HLTH251) OR (HLTH105 AND HLTH151 AND HLTH251) OR (HLTH104 AND HLTH128 AND HLTH130) OR (HLTH105 AND HLTH128 AND HLTH130) OR (HLTH104 AND HLTH130 AND HLTH151) OR (HLTH105 AND HLTH130 AND HLTH151) OR (HLTH104 AND HLTH128

Corequisite: None

HLTH341 Teaching Human Sexuality

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Intended for students interested in health education. It includes the information and skills needed to facilitate the planning and implementation of human sexuality education. Emphasis is placed on topics within human sexuality that are typically included in kindergarten to grade 12 sexuality education. The course meets the combined standards for the National Commission on Accreditation in Teacher Education (NCATE) and Society for Public Health Education-American Association for Health Education (SABPAC).

Prerequisite: None

Corequisite: None

HLTH342 Functional Anatomy 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A clinically based approach to human anatomy stressing the functional relationship and interaction of the various anatomical structures. Human cadaver dissection by the students is an integral part of the laboratory sessions. Major body areas covered include the upper extremity, head, sensory organs, and nervous, urinary, reproductive, integumentary, and endocrine systems.

Prerequisite: None

Corequisite: None

HLTH350 Health Program Planning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Grounded in effective assessment of existing public health liabilities and assets and input from the priority population. The emphasis is on proven models that impact the health profile of a community, state, and nation. Students will be guided through identifying and analyzing how various models provide a continuous series of steps or phases in planning, implementation and evaluation.

Prerequisite: (HLTH104 AND HLTH215)

Corequisite: None

HLTH353 Physiology of Exercise

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Lectures, assigned readings, discussions, and laboratory exercises to aid in scientific evaluation and understanding of the effects of muscular activity upon the human body and its response and adaptation to stress. Applications are made to personal assessment and human performance under all conditions.

Prerequisite: (HLTH128 AND HLTH129 AND HLTH130 AND HLTH131)

Corequisite: None

HLTH365 Evaluation Techniques in Athletic Training 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed for athletic training students to develop injury evaluation techniques. Topics will include the evaluation of concussions and upper extremity injuries including the wrist, hand, fingers, elbow, forearm, shoulder, head, face, thorax, and abdominal regions.

Prerequisite: None

Corequisite: None

HLTH401 Current Issues in Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Health is a dynamic and rapidly changing field that requires constant and continuous monitoring and study to keep abreast of contemporary developments. Selected current health topics drawn from popular and professional literature are presented and discussed. Extensive utilization of current newspapers on a day-to-day basis is also stressed.

Prerequisite: (HLTH105) OR (HLTH154) OR (HLTH104)

Corequisite: None

HLTH402 Evaluation in Health Education and Promotion Programs

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

An orientation to evaluation for students in health education. The emphasis is placed on developing and interpreting evaluation projects including evaluation design, measurement and using evaluation outcomes for decision-making. Qualitative and quantitative assessments are included to provide the learner with a variety of tools to assess the efficacy of health programs.

Prerequisite: None

Corequisite: None

HLTH404 Administration and Organization of Athletic Training 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to prepare students for employment by organizing a resume, developing interview skills and employee evaluations, researching continuing education options, making decisions about employee conflict, and identifying Federal and State laws governing employment. Students will learn about the psychological techniques pertinent to athletics, as well as appropriate referral options and counseling techniques. In addition, this course will provide students with a strong background in research methodology and current issues in athletic training.

Prerequisite: None

Corequisite: None

HLTH406 Biomechanics of Musculoskeletal Injury

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide students in health-related professions with an advanced clinical background in the relationship between human biomechanics and musculoskeletal injury. The course examines the coordination of movement and the forces placed on various tissues of the body by physical activity, specifically in athletics and industrial work environments. Students explore various prevention/treatment interventions and are exposed to clinical problems in orthopedics, rehabilitation, and epidemiologic research.

Prerequisite: (HLTH305)

Corequisite: None

HLTH407 Advanced Human Physiology and Mechanisms of Disease

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Designed to investigate areas of physiology at a deeper level than HLTH251 (Human Physiology) and explores alterations in the functioning of human organ systems, including the etiology, pathogenesis, and clinical manifestations of common disease states. Topics covered are those with significance to the biomedical professions.

Prerequisite: (HLTH128 AND HLTH129 AND HLTH130 AND HLTH131)

Corequisite: None

HLTH410 Community Health Organization Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce the health educator to the work environment of community agencies, schools, hospitals, business and industry, as well as institutions of higher education. Professional skills include the ability to assess, plan, implement, coordinate and evaluate health education programs and services. Key areas of study also include the ability to deal with political action strategies, as a resource person, advocate for health education, effectively communicate, perform a job search, participate in public relations, conduct fund raising and grant procurement. This course includes the information and skills required by The National Commission for Health Education Credentialing, Inc, the Society for the Public Health Education, and the American Association for Health Education (SOPHE/AAHE), the accreditation body for health educators.

Prerequisite: (HLTH215)

Corequisite: None

HLTH415 Introduction to Pharmacology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an introductory course in pharmacology, which focuses on principles of drug actions and major classes of drugs emphasizing mechanisms of action, rationale for therapeutic use, side effects, and relevant toxicities. Emphasis will be placed on pharmacotherapeutics so as to promote an understanding of the rational use of drugs in the clinical setting.

Prerequisite: None

Corequisite: None

HLTH420 Clinical Evaluation & Rehab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed for those students pursuing physical or occupational therapy, physician assistant, chiropractic, or other health related professions. Principles of evaluation and treatment of orthopedic dysfunction and procedures in physical/occupational therapy, as well as instruction in proper medical note taking, are taught by both lecture and laboratory sessions. This course is designed to be taken prior to the student's field experience.

Prerequisite: (HLTH128 AND HLTH130 AND HLTH200 AND HLTH305) OR (HLTH151 AND HLTH200 AND HLTH251 AND HLTH305)

Corequisite: None

HLTH440 Research in the Health Sciences

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An orientation to research and evaluation for students in the health sciences. The emphasis is placed on developing, interpreting and evaluating research studies including design, measurement and use of evaluation outcomes for professionals in the health science field. Emphasis will be placed on the utilization of library skills, the reading and analysis of the professional literature and the development of a literature review and methodology on an issue of interest to the student in the health science field. Restrictions Upon Student Registration: Health Science majors with 75 or more credits. MATH107 Basic Statistics preferred but not required or by permission of the instructor.

Prerequisite: (MATH107)

Corequisite: None

HLTH451 Advanced Human Anatomy

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A study of the gross anatomical relationships between major structures, organs, vessels, and nerves. Human cadaver observation and dissection of all major systems of the body will be conducted by students and included in the laboratory sessions.

Prerequisite: (BIOL106 AND BIOL107 AND HLTH128 AND HLTH129 AND HLTH130 AND HLTH131)

Corequisite: None

HLTH453 Athletic Training Clinical Experience 1

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This course is designed to allow students to begin applying athletic training clinical skills and proficiencies to real life situations under the supervision of a certified athletic trainer. The skills developed by the students will address competencies listed under the following content areas: Risk Management and Injury Prevention, Assessment and Evaluation, Acute Care of Injury and Illness, and General Medical Conditions. Restricted to students accepted into the Athletic Training Education Program.

Prerequisite: None

Corequisite: None

HLTH454 Athletic Training Clinical Experience 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to allow students to begin applying athletic training clinical skills and proficiencies to real life situations under the supervision of a clinical instructor. The skills developed by the students will address competencies and proficiencies listed under the following content areas: Risk Management and Injury Prevention, Assessment and Evaluation, Acute Care of Injury and Illness, Therapeutic Modalities, and Psychosocial Intervention/Referral.

Prerequisite: None

Corequisite: None

HLTH455 Athletic Training Clinical Experience 3

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This course is designed to allow students to begin applying athletic training clinical skills and proficiencies to real life situations under the supervision of a certified athletic trainer. The skills developed by the students will address competencies listed under the following content areas: Risk Management and Injury Prevention, Assessment and Evaluation, Acute Care of Injury and Illness, Pharmacology, Therapeutic Modalities, Therapeutic Exercise, General Medical Conditions and Disabilities, Nutritional Aspects of Injury and Illness, Psychosocial Intervention and Referral, and Health Care Administration. Restricted to students accepted into the Athletic Training Education Program.

Prerequisite: None

Corequisite: None

HLTH456 Athletic Training Clinical Experience 4

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

This course is designed to allow students to begin applying athletic training clinical skills and proficiencies to real life situations under the supervision of a certified athletic trainer. The skills developed by the students will address competencies listed under the following content areas: Risk Management and Injury Prevention, Assessment and Evaluation, Acute Care of Injury and Illness, Pharmacology, Therapeutic Modalities, Therapeutic Exercise, General Medical Conditions and Disabilities, Nutritional Aspects of Injury and Illness, Psychosocial Intervention and Referral, and Health Care Administration. Restricted to students accepted into the Athletic Training Education Program.

Prerequisite: None

Corequisite: None

HLTH457 Athletic Training Clinical Experience 5

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This course is designed to allow students to begin applying athletic training clinical skills and proficiencies to real life situations under the supervision of a certified athletic trainer. The skills developed by the students will address competencies listed under the following content areas: Risk Management and Injury Prevention, Assessment and Evaluation, Acute Care of Injury and Illness, Pharmacology, Therapeutic Modalities, Therapeutic Exercise, General Medical Conditions and Disabilities, Nutritional Aspects of Injury and Illness, Psychosocial Intervention and Referral, and Health Care Administration. Restricted to students accepted into the Athletic Training Education Program.

Prerequisite: None

Corequisite: None

HLTH462 Physical Modalities in Sports Medicine

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The theory and application of hydrotherapy, electrotherapy, thermotherapy, cryotherapy, manual and mechanical techniques for the prevention and care of athletic injuries. Lab included.

Prerequisite: None

Corequisite: None

HLTH463 Therapeutic Exercise & Rehab

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Theory and application of exercise, rehabilitation techniques, and therapeutic equipment for the prevention and care of athletic injuries. Methods of strength and the application of kinesiological, physiological, and physical principles in injury prevention.

Prerequisite: None

Corequisite: None

HLTH485 Professional Field Experience in Health Science

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 12 sh]

The Professional Field Experience provides students with on-the-job experience in a variety of health services and health care areas. The student works with professionals in the field and is exposed to individually selected programs, procedures and settings. Supervision is provided by both the instructional staff of the university and the cooperating agency.

Prerequisite: None

Corequisite: None

HLTH490 Health Science Capstone

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to be a culminating educational experience for the health science student, the health science capstone course integrates coursework, knowledge, skills and experiential learning to enable the student to demonstrate a broad mastery of learning across the curriculum. The course provides an opportunity to integrate previous courses and experiences in and outside of the health science major.

Prerequisite: (HLTH440) OR (HLTH404)

Corequisite: None

HLTH498 Health Science Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An analysis of topics related to health science within a framework provided by the instructor. Examples include but are not limited to: contemporary issues in healthcare; a comparative analysis of healthcare systems in different countries; health issues related to population, economics, social and other factors; healthcare issues of special populations; the healthcare crisis in the United States; and emerging healthcare technologies and fields.

Prerequisite: None

Corequisite: None

HLTH600 Substance Abuse Issues

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to provide current, accurate, and documented information concerning drug use and abuse in society. Special attention will be given to prevention, intervention, and treatment. This course will aid individuals involved in education or developing educational programs dealing with drug awareness.

Prerequisite: None

Corequisite: None

HLTH601 Current Issues in Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Health is a dynamic and rapidly changing field that requires constant and continuous monitoring and study to keep abreast of contemporary developments. Selected current health topics drawn from popular and professional literature are presented and discussed. Extensive utilization of current newspapers on a day-to-day basis is also stressed.

Prerequisite: None

Corequisite: None

HLTH603 Gross Human Anatomy

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Gross anatomy is studied regionally stressing relationships of major structures, organs, vessels, and nerves. Human cadaver observation and dissection by students are included in the laboratory sessions. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine are stressed.

Prerequisite: None

Corequisite: None

HLTH625 Grief and Loss Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to recognize loss, grief and bereavement as an important part of life. The course contributes to general education through the development of knowledge and skills necessary to address loss, grief and bereavement in personal and professional roles. This course will aid individuals involved in education or developing educational programs concerning loss and grief including educational systems, communities and health care providers.

Prerequisite: None

Corequisite: None

HLTH630 Women's Health Issues

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses relevant issues regarding women's health and puts this knowledge to use. Provides a forum for the presentation of medical and scientific information on the health needs of women. For the context of this course, women's health issues are defined as any matters that affect women's health differently from that of men.

Prerequisite: None

Corequisite: None

HLTH670 Sex Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Human sexuality from a biological, behavioral and cultural perspective. The component parts of each area are integrated to provide a comprehensive and total concept of human sexuality.

Prerequisite: None

Corequisite: None

HONR101 Honors: Historical & Philosophical Studies 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This honors class emphasizes the study of philosophers from the early Egyptian period to the theories of Thomas Aquinas. The student can expect to read works by Plato, Aristotle, Socrates, Augustine, and books dealing with Taoism, Christianity, Islam, Hinduism, and a myriad of other philosophical topics.

Prerequisite: None

Corequisite: None

HONR102 Honors: Historical & Philosophical Studies 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of major civilizations of the world since 1500, with special attention to the analysis of philosophical theories and historical developments. Topics include the Renaissance, Absolutism and Constitutionalism, the Enlightenment, Eastern and Islamic tradition, Revolutionary and Natural Rights theory, Conservatism and Romanticism, Liberalism and Nationalism, Marxism, Imperialism, Darwin, Freud, Existentialism, Feminism, and new and old directions in the Third World. Emphasis on an interdisciplinary approach to interpretation of classic and modern works.

Prerequisite: None

Corequisite: None

HONR105 Honors: Mathematics in Contemporary Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course presents a variety of mathematical topics that are relevant to contemporary intelligent citizenship. The chosen topics will be studied in detail through guided experimentation, discovery, conjecture formulation, and analysis. Collaborative learning will be emphasized throughout the course. This course is open to any student in the Honors Program.

Prerequisite: None

Corequisite: None

HONR110 Honors: Concepts in Biological Sciences

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on select current issues in this important field of inquiry. Classroom activities include lectures intended to familiarize students with basic concepts needed to understand technical aspects of the science. Class discussions and student presentations cover a range of issues of current interest. Laboratory experiences are directed by written protocol, computer simulation, and experimentation. This course meets General Education Natural Science requirement.

Prerequisite: None

Corequisite: None

HONR111 Honors: Composition/Literature 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Honors Composition and Literature 1 emphasizes the reading of classic works. A tentative reading list includes: Homer's Iliad, Virgil's Aeneid, Dante's Inferno, Shakespeare's Julius Caesar and Antony and Cleopatra and Milton's Paradise Lost. This is a tentative reading list that may change.

Prerequisite: None

Corequisite: None

HONR112 Honors: Composition/Literature 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Enables students to think critically by becoming better writers and readers. Students will examine, through their own writings and the writings of others, various views of God, self, and society. This course selects from such diverse authors as Donne, Pirandello, Ellison, Swift, Whitman, Eliot, O'Connor, Ginsberg, Mishima, Wiesel, Kingston, Achebe, Doerr, Hurston.

Prerequisite: None

Corequisite: None

HONR115 Honors: Earth Resources and Environment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This inquiry-based course is designed to explore occurrences, distribution, and uses of Earth resources, including minerals, rocks, soil, energy, and water. Environmental degradation resulting from exploration and exploitation of Earth resources is investigated in the context of mining history in central Pennsylvania. The concept of sustainable development of natural resources and land is examined through lecture, laboratory exercises, field observations, and hands on experience with field and laboratory equipment commonly used by geoscientists.

Prerequisite: None

Corequisite: None

HONR180 Honors: Introductory Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Honors Introductory Psychology is a first course in psychology for honors students who wish a general education in the fundamentals of psychological investigation. Students will be exposed to the broad sub-fields and major schools of psychology with an emphasis on interdisciplinary study of psychological topics, small group interaction, debate, and development of investigatory skills. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

HONR200 Honors: Nutrition for Wellness

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to investigate contemporary nutrition concerns. While the course will emphasize the relationship of nutrition to overall good health and well being, it will specifically focus on an understanding of the most current issues related to sound nutritional practices.

Prerequisite: None

Corequisite: None

HPED016 Strength Training

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Strength training principles and individually developed programs and progressions.

Prerequisite: None

Corequisite: None

HPED060 Wellness for Life

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the interdependence of personal wellness and fitness. An emphasis will be placed on the development of a personal understanding of aerobic exercise options and their relevancy to health risk and fitness appraisal techniques. The course will involve regular activity. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

HPED103 Teaching Soccer

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of soccer. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED104 Foundations of Physical Education

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

Designed as an orientation to the physical education profession. This includes the nature and scope of the field, underlying scientific principles, a brief historical background, qualities of successful professionals, and observation/interaction field experiences. The role of physical education as part of the school systems is investigated. Students start a professional portfolio. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED105 Teaching Basketball

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Primarily an activity course involving a progression in basketball skills. The course includes an emphasis on skill progressions, teaching methods, strategy, and rules for the game of basketball. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED106 Introduction to Sport Administration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Prepares students to work as managers and administrators in a variety of sport settings. Skills needed to plan and manage sport events and sport programs in a variety of settings will be covered. Private and public schools, and sport club environments will be explored. Enrollment in this course is restricted to health and physical education majors in the Sport Administration track, unless otherwise approved by the health and physical education department chair.

Prerequisite: None

Corequisite: None

HPED107 Teaching Field Hockey

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skill, strategy and rules of the game of field hockey. The emphasis of this course is on skill learning, performance analysis, and progression. Additionally, the course encompasses teaching methods and class management and safety for appropriate age groups. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED109 Teaching Wrestling

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

A methods and activity course involving teaching and learning fundamental wrestling skills and progressions. The course includes an emphasis on skill progressions, teaching methods, strategy rules, and skill analysis for the sport of wrestling.

Prerequisite: None

Corequisite: None

HPED111 Teaching Racquet Sports

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A combination methods-activity course involving teaching and developing skill progression in tennis, badminton, racquetball and pickleball. The subject matter includes the basic skills, skill analysis of performance, teaching strategies, class organization, safety, lead-ups, game play, rules, and strategies of the games. In addition, the course provides students with the knowledge and skills of self-evaluation of teaching performance and peer evaluation. It is designed to meet the National Association of Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED113 Teaching Volleyball

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of volleyball. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED114 Aerobics 2

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced aerobic conditioning principles and exercises.

Prerequisite: None

Corequisite: None

HPED119 First Year Seminar for Health and Physical Education Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements.

Prerequisite: None

Corequisite: None

HPED120 Teaching Baseball & Softball

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed to teach the fundamental skills, strategies, and rules of baseball and softball and the techniques and methods of teaching these to students. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED128 Judo

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduction to beginning judo skills.

Prerequisite: None

Corequisite: None

HPED132 Beginning Swimming

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

For non-swimmers, or those not comfortable in the water, to develop basic skills and confidence.

Prerequisite: None

Corequisite: None

HPED133 Intermediate Swimming

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

For swimmers who wish to learn or improve stroke skills and aquatic fitness.

Prerequisite: None

Corequisite: None

HPED134 Swimming/Emergency Water Safety

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This Swimming/Emergency Water Safety course in advanced swimming techniques is designed to enable the students to become proficient in basic swimming strokes and related aquatic skills. The students will also develop fundamental water safety skills. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED200 Teaching Aerobics

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed to involve students with organizational procedures, teaching progressions, safety factors, components of low-impact aerobics, step aerobics and circuit aerobic workouts (abdominal exercises, resistance bands, hand weights, jump ropes, etc.). It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED204 Psychological and Social Dimensions of Physical Activity and Sport

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to introduce psychological and sociological dimensions of sport and physical activity as they relate to roles as teachers of physical activity and sport in educational settings. Students will be required to relate psychological and sociological principles of physical activity to curriculum and program development, teaching style and methods, and positive learning environments for sport and physical activity. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED206 Teaching Lacrosse

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of lacrosse. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED208 Introduction to Sport and Exercise Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introductory overview of the psychological aspects of sport and exercise. Provides a broad overview for understanding the behavior of individuals in sport and exercise settings. Integrates theories, principles and models with an emphasis on current research findings from sport and exercise settings. Content areas include personality and motivation factors, performance in groups, and the psychological effects of participation in sport and exercise..

Prerequisite: (PSYC100)

Corequisite: None

HPED210 Teaching Folk/Social Dance

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to a variety of dances which have been the tradition of many ethnic cultures. Emphasis will be placed on the performance of American Heritage, International, Social, and Square Dances. Teaching techniques specifically used for these categories of dance will be the primary focus for use in grades K-8 and for adult recreation. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: (HPED112)

Corequisite: None

HPED213 Elementary Physical Education Activity

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to cover activities in an elementary physical education curriculum. Emphasis is placed upon teaching techniques and safety procedures presented and practiced in peer teaching experiences. Developmental characteristics of children will be integrated into current curricular trends. Students will build a repertoire of elementary physical education activities selected from all categories. This course meets the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED215 Teaching Track

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to prepare the student with an understanding of and skill proficiency in track and field events. Skill analysis and teaching techniques will be stressed. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED218 Teaching Tumbling & Gymnastics

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Emphasizes developmentally appropriate skills for ages Kindergarten through 8th grade. Content includes progressions, teaching methods, assessment, basic mechanical principles and spotting. The students will demonstrate minimal competencies in skill execution. The course will provide opportunities for skill analysis, peer teaching, and writing a lesson plan. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED222 Lifeguard Instructor

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to train the student to teach courses in the American Red Cross (ARC) program, specifically, Basic Water Rescue, Lifeguard Training and Lifeguard Training Review, Lifeguard Management and Waterfront Lifeguarding. Students will also be able to teach CPR and Automated External Defibrillation (CPR/AED) for the Professional Rescuer and First Aid. Additionally students will be recertified as a lifeguard. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED223 Contemporary Issues and Problems in Sport Administration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students taking this course consider current issues and problems in sport management in a seminar format that requires solutions to practical problems and visits to sport facilities to consider management problems. Students research, discuss and debate current issues in the area of sport administration. Guest speakers, presentation of position papers and class debate allow students to express and appreciate a variety of perspectives related to sport administrative problems and their solutions.

Prerequisite: None

Corequisite: None

HPED228 Synchronized Swimming

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Students are introduced to the components of synchronized swimming with an emphasis on sculling, stroke adaptation and figure execution. Basic choreographic techniques are also explored. Students must have the ability to swim in deep water and knowledge of the basic swimming strokes: front crawl, sidestroke, backstroke, breaststroke, and elementary backstroke.

Prerequisite: None

Corequisite: None

HPED230 Aquacise

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

The students are introduced to a lifetime sport exercise option utilizing the aquatic medium. Exercise areas, such as free-standing water drills, pool side standing drills, circuit training, running, and relaxation techniques, are emphasized. Students must have ability to swim in deep water and knowledge of the basic swimming strokes: front crawl, sidestroke, backstroke, breaststroke, and elementary backstroke.

Prerequisite: None

Corequisite: None

HPED234 Water Safety Instructor

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to train the student to teach the following American Red Cross (ARC) courses: 1) Parent & Child Aquatic Program; 2) Longfellow's Whale Tales Educational Program; 3) Progressive Swimming Courses (levels I-VI); 4) Water Safety Outreach Program; and 5) Safety Training for Swim Coaches. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED240 Intro to Physical Education & Sport in the Correctional Facility

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the nature and scope of physical education and sport along with their allied disciplines in the correctional facility. An introduction to the study of physical education and sport in the correctional environment will be conducted at the local, state and federal levels.

Students will be introduced to an overview of the principles of managing physical education and sport programs in the correctional facility environment. The various philosophies, principles of program design, selection of intramural and varsity sports, equipment procuring and facility management, budget and finance, routine procedures, law and legal liability, staff selection and organization, health, fitness, wellness and recreational pursuits will be reviewed.

Prerequisite: None

Corequisite: None

HPED245 Health and Physical Education in the Elementary School

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed for the elementary classroom teacher. The course will focus on the health content and process of the instructional phase of the health and physical education program in the elementary school through classroom and laboratory activities. The ten basic areas of appropriate health content for the elementary school curriculum will be examined. An introduction to the scope of appropriate physical education activities for the elementary school child will be presented. Correlation of physical education and health education activities with other aspects of the total elementary school curriculum will be stressed. Restricted to students in the Elementary Education, Early Childhood Education, and Special Education majors.

Prerequisite: None

Corequisite: None

HPED260 Principles and Practices of Conditioning

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to acquaint the future teacher/coach with the principles of teaching physical conditioning. Students are provided with a practical experience in program design and implementation. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED300 Advanced Techniques and Coaching Soccer

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A comprehensive insight to coaching basic soccer skills. Emphasis is given to team organization aiming to improve the efficiency of the essential aspects of the game--how to score and prevent goals. Basic theory with a strong emphasis towards audio-visual teaching aids.

Prerequisite: (HPED103)

Corequisite: None

HPED301 Advanced Techniques & Coach Field Hockey

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced techniques of modern field hockey. Consideration of the field hockey player as an athlete. Includes theoretical and practical work.

Prerequisite: (HPED107)

Corequisite: None

HPED302 Motor Learning Applied to Physical Education

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduces various theories of sport skill acquisition and information processing during learning of complex motor skills. Emphasis is placed on the application of practice, skill transfer, memory, practice schedules, motivation, feedback including knowledge of results, knowledge

of performance, neuromotor functioning, and differences in motor abilities that are involved in motor skill performance. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: (HLTH130 AND HPED352)

Corequisite: None

HPED304 Advanced Techniques and Coaching Wrestling

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to familiarize students with the maturational, physiological and psychological aspects of coaching interscholastic wrestling. Special emphasis is given to techniques and to the organization and administration of interscholastic elementary and secondary programs.

Prerequisite: None

Corequisite: None

HPED305 Psychology of Coaching

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive overview of the coaching profession and the coach-athlete relationship. Emphasis is placed on high school and intercollegiate level sport with consideration given to coaching youth and recreational sport programs. The course will be an application of current research findings and principles as they relate to coaching. The course will prepare students for the American Sport Education Program certification.

Prerequisite: None

Corequisite: None

HPED306 Advanced Techniques Coaching Track

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The philosophical, training and technical aspects of coaching all events of track and field. Also teaches the mechanics of organizing and running a home track meet including all events.

Prerequisite: (HPED215)

Corequisite: None

HPED307 Advanced Techniques and Coaching Basketball

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Coaching basketball on the competitive level. Subject matter will include formulating a philosophy, selecting a squad, pre-season/in-season/post-season practice, scouting opponents, keeping team statistics, establishing training and grooming codes, basketball research, proper techniques, and strategy.

Prerequisite: (HPED105)

Corequisite: None

HPED308 Advanced Techniques & Coaching Baseball

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This course is designed to aid in development of a specific philosophy of coaching baseball. The course will also be designed to prepare the student for specific problems including: teaching fundamentals, techniques, organization, responsibilities, coach-administration, coach-parent, coach-player relationships, and basic coaching ethics.

Prerequisite: (HPED105)

Corequisite: None

HPED310 Health/PE Professional Semester Techniques & Strategies Teaching

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Orient the students to the principles of a good physical education program. Special attention given to pedagogy and progressions that will lead to effective learning of physical activities. Application of the theory and methods is made during in-class teachings and participation in the public schools. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED311 Health/PE Professional Semester: Teaching Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to classroom teaching techniques in Health Education. Students gain experience in constructing units of instruction and in using a variety of teaching aids/strategies to enhance the teaching/learning process. Required for Health and Physical Education certification. Focuses on learning styles and active learning strategies. It is designed to meet the National Association for Sport and Physical Education (NASPE) and the American Association for Health Education (AAHE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED312 Health/PE Professional Semester: Adapted Physical Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Offer basic preparation in adapted physical education to physical education and special education majors who wish to expand their knowledge and ability to work with exceptional students. Emphasis is on identifying students with special needs, the causes and characteristics associated with each type of need, and acquiring competencies in appropriate instructional and management procedures. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED314 Health/PE Professional Semester: Measurement for Evaluation in Health and Physical Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to equip students with basic knowledge of statistical concepts and evaluation techniques used in health and physical education. Emphasis will be placed on how to measure performance, and the use of performance data to improve learning. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED316 Advanced Techniques and Coaching Volleyball

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced techniques, strategies and patterns of play for power volleyball. Theoretical and practical application of playing and officiating techniques.

Prerequisite: (HPED113)

Corequisite: None

HPED317 Evaluation in Sport Administration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intended for future professionals in the field of Sport Administration, the course utilizes evaluation theories, models, methods and competencies. Emphasis is placed on the practical application of the evaluation process which will focus upon sport organization (public and private) programs and personnel within a sports organization.

Prerequisite: (HPED106 AND HPED223)

Corequisite: None

HPED318 Advanced Theory and Application of Sport and Exercise Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced study and application of the psychological aspects of sport and exercise. Integrates theories, principles and models of sport and exercise psychology with an emphasis on current research findings. Analysis and discussion of recent research includes the effects of psychological variables on performance in sport and exercise settings, as well as consideration of application in other domains. Applied component complements lecture material.

Prerequisite: (HPED208)

Corequisite: None

HPED321 Management and Leadership of Sport

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth analysis of the sport industry with special emphasis given to the sport manager's roles and functions. An in depth analysis of planning, organizing, leading, and controlling as they apply to the sport managers and leaders in a sport organization.

Prerequisite: (HPED106 AND HPED223)

Corequisite: None

HPED323 Sport and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the role of sport in North American culture and in a global context. The pervasiveness of sport in all areas of society will be investigated from a sociological perspective. Analysis of issues impacting informal, organized and professional sports will be considered. Attention will be given to the common characteristics within sport and society, including societal values, social problems, politics, the economy, disabilities, mass media, and race.

Prerequisite: (HPED106)

Corequisite: None

HPED324 Sport Law and Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Examination of sport law and ethics to provide students with knowledge of legal issues that are involved in sport. Sport law provides legal and ethical issues and information that is often encountered in sport and physical activity. This course will analyze legal elements, court cases, and awareness of the rights of sport as it relates to participants, spectators, managers, and teachers.

Prerequisite: (HPED106 AND HPED223)

Corequisite: None

HPED325 Teaching Nutrition

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

Health and Physical Education majors will explore teaching and curricular concepts in nutrition as part of a Health Education program. Students will apply their base knowledge of nutrition in the development of teaching units, which emphasize good health promotion practices.

Prerequisite: None

Corequisite: None

HPED332 Sport Marketing Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide the student with knowledge pertaining to sports marketing and its various aspects including: pricing, promotion, sponsorships, endorsements, research, and licensing.

Prerequisite: None

Corequisite: None

HPED335 Sport Administration and Community Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intended for future professionals in the field of Sport Administration. Analyzes the various relationships between a sport administration department (public or private, high school or college) and the community in which it is located. Emphasis will be placed on the practical application of concepts, principles and practices between an educational institution and community associations and the role of the sport administrator. Restricted to Sport Administration majors or permission of the instructor.

Prerequisite: (HPED106 AND HPED223)

Corequisite: None

HPED340 Sport Media Communication Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the interrelationship between sports and media in today's society. This course draws on theories of rhetoric and social criticism by examining media's role in telling the story of sports and, in telling that story, shaping and reinforcing cultural values. The course will utilize various broadcasts, print, and electronic media to examine how they are vital to the success of the sport organization.

Prerequisite: None

Corequisite: None

HPED350 Advanced Techniques and Coaching Swimming/Diving

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Prepares student with background and understanding of all areas for teaching and coaching competitive swimming and diving. In-depth attention given to competitive rules and regulations, swimming programs, and all individual skills; psychology of coaching swimmers and divers; types of training programs, pacework, and mechanical principles involved in swimming.

Prerequisite: None

Corequisite: None

HPED351 Management of Aquatic Programs & Facilities

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Students are introduced to the role of aquatic facilities in schools, communities and agencies. The planning and design of aquatic facilities are explored as well as basic management and operations.

Prerequisite: None

Corequisite: None

HPED352 Kinesiology

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to increase one's understanding of human movement and to provide the foundation for critical application of analysis of physical activity and exercise. The course content includes both anatomical and biomechanical concepts. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: (HLTH151) OR (HLTH128)

Corequisite: None

HPED360 Advanced Techniques & Coaching Tennis

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Enhances students' tennis skills and provides teaching/coaching experiences for competitive tennis. Stroke analysis and diagnosing player faults are stressed, as well as skill drills for correction of faults. Administrative duties of the tennis coach are presented along with other organizational duties such as scheduling, purchasing equipment, trips, practice sessions, and setting up tournaments.

Prerequisite: (HPED111)

Corequisite: None

HPED400 Professional Development

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Facilitate authentic learning experiences for pre-service health and physical education majors. Students observe and participate in school health and physical education settings, K-12. Students develop a professional portfolio supporting their experiences and professional philosophy. Community professionals and resources are used to complement the learning experience through the presentation of seminar-practicum related to current teaching tools each week. This course meets the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED401 Sport Facility Management and Operation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the role of sport that will allow students to learn the factors involved in obtaining, running, building, and managing sporting events. They will also learn the guidelines for designing, constructing, maintaining, scheduling, and managing a sport facility.

Prerequisite: (HPED321 AND HPED323 AND HPED324 AND RECR330)

Corequisite: None

HPED402 Sport Business Finance

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide a detailed examination of the relationship between sport and corporate sponsorship. Topics covered will include the theoretical premise of sponsorship, alignment marketing, strategic communication through sponsorship, determining value of a sponsorship, and evaluation of sponsorship activities. Perspectives from the event holder (i.e., property) offering a sponsorship and from the organization functioning as the sponsor will be considered.

Prerequisite: None

Corequisite: None

HPED410 Sociology of Sport

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students are introduced to the role of sport in society including issues in politics, economics, women's concerns, racism, media and social problems of athletes. Special attention will be given to current issues in society and their effect on and by sport.

Prerequisite: None

Corequisite: None

HPED426 Practicum in Health & Physical Education

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Taken concurrently with HPED425, this course provides the forum for discussing problems common to all student teachers and possible solutions to these problems. Skills involved with obtaining a teaching position are also practiced and discussed.

Prerequisite: None

Corequisite: None

HPED427 Secondary Student Teaching and Professional Practicum

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

HPED450 Physical Education Professional Field Experience

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 12 sh]

The Professional Field Experience is designed to provide the student with the opportunity for on-the-job experience in a variety of physical education settings. The student will work with professionals in the field and be exposed to a wide variety of teaching, coaching, management, supervisory, and technical tasks. Experiences may take place in public and private agencies, schools, and athletic settings.

Prerequisite: None

Corequisite: None

HPED463 Organization & Administration of HPER

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore the philosophy of health and physical education, leadership skills, facilities and equipment management, personnel management, budgeting, risk management, public relations, marketing, consultation, and current issues. Students will be guided in the preparation of position papers, research reports, and presentations on topics covered with the intent of providing realistic pre-professional experiences in the field. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

HPED465 Organization and Administration of Sport and Athletic Programs

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The philosophy of athletics and sport programs, communication and leadership skills, facilities and equipment management, budgeting, personnel management, risk management, public relations and current issues will be explored. Students will be guided in the preparation of position papers, research reports, and presentations relating to the administration of athletic and sport programs, with the intent of providing realistic pre-professional experiences in the field. Amateur, professional, public and private athletic sport settings will be discussed.

Prerequisite: (HPED106 AND HPED223)

Corequisite: None

HPED493 Elementary Student Teaching and Professional Practicum

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh]

Provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

HPED494 Secondary Student Teaching and Professional Practicum

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

HUM328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

ITAL101 Italian 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

ITAL201 Italian 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

ITAL202 Italian 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

JAPN101 Japanese 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

JAPN102 Japanese 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None

JAPN201 Japanese 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

JAPN202 Japanese 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

LANG119 First Year Seminar for Foreign Language Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the Lock Haven University Teacher Education Conceptual Framework and national standards for foreign language and English. The course guides students through the Stage I teacher education requirements and early field experience tasks, and addresses topics taught in generic freshman seminars.

Prerequisite: None

Corequisite: None

LANG125 Introduction to Cultures

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the people and cultures of a specific country or geographical area. Through lectures, discussions, and an array of visual materials, the course, taught in English, addresses such topics as traditions, religious practices, major historical events, social and political trends, language, film, cuisine, theatre and music, as well as literature. (Course may be taken multiple times and not count as a repeat.)

Prerequisite: None

Corequisite: None

LANG207 Secondary Education 1: Foreign Language

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Course description is missing.

Prerequisite: None

Corequisite: None

LANG328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Language Seminar

Prerequisite: None

Corequisite: None

LANG415 Student Teaching and Practicum Secondary 1: Foreign Language

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None
Corequisite: None

LANG416 Student Teaching and Practicum Secondary 2: Foreign Language

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None
Corequisite: None

LANG628 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of major films produced in Spain, with emphasis on the three leading directors: Luis Buñuel, Carlos Saura and Pedro Almodóvar. (All films are subtitled; no knowledge of Spanish is necessary for the seminar.) Basic concepts of film criticism will be applied to analyses of films and social history and aesthetic movements will be considered where necessary to an understanding of specific films.

Prerequisite: None
Corequisite: None

LART600 Core Introductory Seminar: Research Methods and Interdisciplinary Thought

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introductory seminar course acquainting students with the interdisciplinary nature of the Masters of Liberal Arts (MLA) program. Students will evaluate works (theories, philosophies, and research methods) that illustrate how interdisciplinary research leads to new insights and discoveries. Students will outline a personal professional development plan, design their program of study, and practice the steps required to construct a capstone proposal.

Prerequisite: None
Corequisite: None

LART601 Cross Cultural Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Prerequisite: None
Corequisite: None

LART605 Women, Technology and the Information Age

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a detailed inquiry into, and analysis of, some of the major social, philosophical and ethical issues concerning women in the age of information technology. Particular attention will be given to the following topics: the education of girls in the elementary and secondary classroom; the technological resources available to women, especially in developing nations; the impact on women in the workplace; the impact on women in terms of family life; the impact on society.

Prerequisite: None
Corequisite: None

LART620 Introduction to Deliberative Public Learning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course introduces students to the theory and practice of deliberative citizen discourse in a democracy. The course links study of theory with participation in actual public forums. Principles of deliberative discourse are studied in relation to theories of democracy and then applied in public forums. Research on public learning and classroom learning are examined, especially in relation to standards-based outcomes assessment. Students will become effective moderators in public deliberative forums and interpreters of results. This course also prepares students for more advanced study of civic engagement and public scholarship and its application in the middle and secondary school settings.

Prerequisite: None
Corequisite: None

LART680 Capstone and Continuing Capstone Studies

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 6 sh]

A research-based seminar designed to facilitate the design, development, and implementation of either a creative or research-based MLA Capstone Project as the culmination of the Master of Liberal Arts program. Restricted to graduate-level students who have completed all other requirements for the Master of Liberal Arts degree, a minimum of 24 credits. Students must also have had their Capstone Proposals approved by the MLA Director.

Prerequisite: None

Corequisite: None

MANG101 Introduction to Management Information Systems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an introduction to management uses of information and information technologies within and between business organizations. It provides students with the tools and background to understand and interpret information issues from a managerial perspective.

Prerequisite: (CISC150) OR (COMP150)

Corequisite: None

MANG220 Introduction to Personal Financial Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course introduces students to personal financial planning concepts and techniques. Financial planning for decision-making and comprehensive lifetime money management are emphasized.

Prerequisite: None

Corequisite: None

MANG305 Operations/Production Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The operations/production function of a business organization is introduced. Topic such as basic manufacturing processes, capacity planning and scheduling, facility location, inventory management, job design, productivity and quality control are investigated.

Prerequisite: (ECON101 AND MATH180) OR (ECON101 AND MATH141)

Corequisite: None

MANG315 Management:Concepts & Strategies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of concepts of management as it applies to formal organizations. Students are introduced to the importance of effective management within organizations. The essential management skills in planning, organizing, staffing, directing, and controlling are examined.

Prerequisite: (ACCT110 AND ECON101)

Corequisite: None

MANG317 Entrepreneurship

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the theory and application of launching successful new business ventures. Students will learn how to evaluate new business ideas, conduct research on their ideas, create a business plan, solicit funding, structure the new venture, test it, and launch it. They will also learn different exit strategies for entrepreneurs and how to evaluate them.

Prerequisite: (MANG315 AND MRKT200) OR (MANG315 AND RECR330)

Corequisite: None

MANG320 Human Resource Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Management of human resources is a primary function of all managers. Emphasis is placed on personnel processes necessary to comply with laws and regulations, and improving labor utilization and productivity.

Prerequisite: (MANG315)

Corequisite: None

MANG325 Financial Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students are introduced to the concepts of financial management with emphasis on the corporate sector. The course is designed to demonstrate financial analysis techniques for both short and long-term planning and control within the firm.

Prerequisite: (ACCT110 AND ECON101)

Corequisite: None

MANG326 Fundamental of Investment Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with basic knowledge about different investment securities and sources of information to enable them to make informed investment decisions. Concepts and methodologies to be used in selecting individual securities and in evaluating an investment portfolio are covered.

Prerequisite: (MANG220 AND MATH107) OR (MANG325 AND MATH107)

Corequisite: None

MANG328 Management Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

MANG350 Small Business Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to help students develop realistic knowledge and practical skills needed to think and operate as a successful small business practitioner. Management-process skills critical to successful performance will be covered.

Prerequisite: (MANG315 AND MANG317)

Corequisite: None

MANG365 Organization Theory & Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced course of particular interest to majors in Business Administration, Political Science, and Sociology. Theories of the nature and functions of organizations will be looked at from the perspectives of managers, workers, consumers, and citizens. The psychological, sociological, economic, political, and cultural impact of organizations will be studied.

Prerequisite: (MANG315) OR (POLI260)

Corequisite: None

MANG400 Business, Society and Government

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to applied business ethics from the perspective of the business manager. Course content emphasizes the interrelationships between business, societal, and government issues that involve the ethical responsibilities of managers, corporate social responsibility and corporate governance. Students will gain an increased understanding of how business relates to and operates within the social and legal environments, as well as awareness of contemporary social issues in management, cultural diversity in the workplace, international and globalization issues, and ecological and environmental issues. Students will develop and utilize skills in critical thinking, moral reasoning and individual decision making.

Prerequisite: (ECON101 AND MANG315 AND MRKT200 AND PHIL102) OR (ECON101 AND MANG315 AND MRKT200 AND PHIL425)

Corequisite: None

MANG425 International Business

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course adds an international emphasis to the student's knowledge of the principles of economics and various management concepts. Using a global business perspective, the course integrates functional management courses such as accounting, finance, marketing and personnel.

Prerequisite: (MANG315)

Corequisite: None

MANG430 International Financial Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

To better understand contemporary events and trends in international business, students are introduced to advanced concepts including financing international business operations and investments, decision making in the multinational firm, the international monetary system, foreign exchange transactions, and international financial institutions.

Prerequisite: (MANG325)

Corequisite: None

MANG475 Capstone Seminar in Strategic Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of major concepts and topics that encompass the field of strategic management. As a capstone seminar, it is an integrating experience in which students are required to apply knowledge and skills gained from previous coursework in the functional areas of business.

Prerequisite: None

Corequisite: None

MATH009 Computational Skills

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is a one-term course in arithmetic or pre-algebra and is intended for students who need to improve their basic computational skills. It contains work with whole numbers, fractions, decimals, ratio and proportion, percents, descriptive statistics, geometry and measures, signed numbers, and solving simple equations and problems. This course does not count towards graduation.

Prerequisite: None

Corequisite: None

MATH100 Essentials of Algebra

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is a one-term introductory algebra course and is intended for students who have a firm background in arithmetic but need to improve their algebra skills in preparation for general education mathematics courses. It covers real and rational numbers and algebraic expressions, solving equations and inequalities, polynomials, graphs, systems of equations, radicals, and quadratic equations. MATH100 is restricted to students with appropriate placement test scores. Ineligible students will not be allowed to register.

Prerequisite: (MATH009)

Corequisite: None

MATH101 Topics in Math

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The mathematical content of the general education program. The topics presented come from a variety of mathematical fields such as: number theory, topology, set theory, algebra, and analysis. Each of the topics included in the course is subjected to careful mathematical analysis.

Prerequisite: (MATH009)

Corequisite: None

MATH107 Basic Statistics 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course presents both basic concepts and computational methods involved in the analysis of sample distributions, with consideration given to probability theory, and a thorough introduction to statistical inference.

Prerequisite: (MATH100) OR (MATH112) OR (MATH113) OR (MATH141)

Corequisite: None

MATH108 Basic Statistics 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major topics are regression and analysis of variance. Multiple regression, along with both one and two-way analysis of variance, are studies.

Prerequisite: (MATH107)

Corequisite: None

MATH110 Consumer Math

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A practical course designed to provide the student with information and computational skills necessary for money management. Topics include: interest, taxes, buying, credit, banking, insurance, annuities, international business, investments, and financial planning.

Prerequisite: (MATH009)

Corequisite: None

MATH112 Intermediate Algebra

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Assists students in acquiring a thorough knowledge and proficiency in algebra. It introduces the student to the rules for operating in algebraic expressions and the justification for these rules. The contents of the course also include an introduction to the function concept, a thorough treatment of first and second-degree equations, topics in higher polynomial equations, and the algebraic structure of the number systems, such as the integers and rationals will also be explained. MATH112 is not open to Mathematics and Mathematics Education majors except by permission of the chairperson.

Prerequisite: (MATH100)

Corequisite: None

MATH113 Precalculus

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major topics are: functions, polynomials, exponentials, logarithms, and trigonometric functions. This material is treated in the modern spirit with emphasis placed on both the development of pertinent concepts as well as the acquisition of essential techniques. The presentation of the topics is balanced between theory and application. Although some treatment of the real numbers is included, the principal mathematical structure involved is the set of rational numbers and its subsets.

Prerequisite: (MATH112)

Corequisite: None

MATH119 First Year Student Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to embed education program requirements into a required course and to support student achievement of Education Program requirements. This course addresses topics taught in freshman seminars. Restricted to first-year secondary education mathematics majors or B.A. mathematics majors.

Prerequisite: None

Corequisite: None

MATH135 Applied Algebra and Trigonometry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Concepts of functions and their graphs are defined and basic combinations of functions are introduced. Properties and graphs of linear, quadratic, and periodic functions are discussed. Trigonometric functions, identities and equations are discussed and graphs of various combinations of trigonometric functions are explored. Some properties such as areas and volumes of geometrical figures are discussed and vectors are introduced. Regression line and estimation of parameters are discussed. Applications in Physical Sciences are also explored.

Prerequisite: (MATH112)

Corequisite: None

MATH141 Calculus 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Algebraic functions, trigonometric functions, and elementary analytic geometry are reviewed. Limits of functions and continuity are introduced. The derivative of a function is defined and properties of the derivative are applied to a variety of problems. The integral is defined and the Fundamental Theorem of Calculus is introduced and used in the evaluation of integrals.

Prerequisite: (MATH113)

Corequisite: None

MATH142 Calculus 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The calculus of transcendental functions is presented. Integration is studied in depth, specifically techniques of integration and applications, as well as improper integrals. Conic sections and indeterminate forms are studied.

Prerequisite: (MATH141)

Corequisite: None

MATH200 Secondary Mathematics Methods 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the first in a two-course sequence of methods of teaching mathematics in grades 7-12. This course includes field experiences and practice teaching. The concentration in this course is on the nature of mathematics, psychology of learning mathematics, teaching of mathematics, history of mathematics education, national and state standards, lesson planning, mathematics-oriented technology, and diversity issues. In addition to these, as the specific topics arise, the course helps students understand the mathematics concepts they will be teaching.

Prerequisite: (EDTF101 AND MATH141 AND PSYC103 AND SPEC204)

Corequisite: None

MATH205 Foundations of Mathematics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the foundation that is necessary for students to make the transition to advanced mathematics. Basic topics of Mathematical Logic with deductive reasoning as applied to mathematical proofs are studied in detail. Mathematical Induction, Set Theory and Theory of Relations and Functions are studied with appropriate proofs.

Prerequisite: (MATH141)

Corequisite: None

MATH211 Linear Methods

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Vector spaces, matrices, linear transformations, and systems of linear equations are defined and the properties of these structures are developed through examples and, to a lesser degree, proof-theoretic techniques. Inner product spaces, eigenvalues, and eigenvectors are also explored. Euclidean vector spaces are emphasized throughout.

Prerequisite: (MATH141)

Corequisite: None

MATH215 Statistics and Geometry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Along with Number Systems(MATH102), this course provides the mathematical ideas and skills for teachers of grades K-6. Topics included are probability and statistics, geometry and measurement, functions, and analytic geometry. Problem solving is emphasized throughout the course. Fulfills General Education Requirements.

Prerequisite: (MATH100) OR (MATH112) OR (MATH113) OR (MATH141) OR (MATH102)

Corequisite: None

MATH225 History of Mathematics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a chronological development of the history of mathematics, interwoven with biographical sketches and outstanding achievement. Begins with the great civilizations of antiquity and progresses through the first few decades of the twentieth century. Addresses contributions from underrepresented groups in a variety of ways. Students study how contributions from culturally diverse populations have significantly aided the development of the field of mathematics, and how mathematics has changed the culture of diverse populations.

Prerequisite: (MATH141)

Corequisite: None

MATH243 Calculus 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Multivariate calculus and its applications are studied, along with three-dimensional analytic geometry. A study of series, culminating with power series representation for functions, is presented. Polar equations and their graphs are studied.

Prerequisite: (MATH142)
Corequisite: None

MATH244 Calculus 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Concludes the undergraduate study of calculus with a detailed treatment of vector analysis, culminating in the three integral theorems of vector analysis: the divergence theorem, Green's theorem, and Stokes' theorem.

Prerequisite: (MATH243)
Corequisite: None

MATH301 Differential Equations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The techniques for solving linear, nonlinear, homogeneous, and nonhomogeneous ordinary differential equations along their applications including initial-value and boundary-value problems.

Prerequisite: (MATH243)
Corequisite: None

MATH302 Number Theory

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of the divisibility properties of the integers. Topics include the congruence relations, arithmetic functions, Gauss' Law of Quadratic Reciprocity, and Diophantine equations as well as applications such as cryptography.

Prerequisite: (MATH205)
Corequisite: None

MATH310 Modern Algebra 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates algebraic structures including groups, rings, and fields. Special emphasis is placed on the concept of isomorphism as well as applications to the algebra of the secondary educational classroom.

Prerequisite: (MATH205)
Corequisite: None

MATH311 Elements of Linear Algebra

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Systems of linear equations, determinant function, vector spaces, inner product spaces, linear transformations, eigenvalues, and eigenvectors are defined and properties of these structures are developed through proof-theoretic techniques. Applications to areas such as geometry, economics, physical science, social science are explored.

Prerequisite: (MATH205)
Corequisite: None

MATH312 Probability & Statistics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the mathematization of probability situations; the application of analysis and set theory to the models involved, and the statistics and statistical inference, which results. Both computational and functional approaches to probability are examined.

Prerequisite: (MATH243)
Corequisite: None

MATH316 Secondary Mathematics Methods 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Provides the second in a two-course sequence of methods of teaching mathematics in grades 7-12. This course includes field experiences and practice teaching. The concentration in this course is on instructional strategies for specific content, the problems of practice, curriculum, unit and lesson planning, assessment, reading and writing strategies in mathematics, technology, diversity issues, adaptations for special needs, and professionalism. In addition to these, as the specific topics arise, the course helps students more deeply understand the mathematics concepts they will be teaching.

Prerequisite: None
Corequisite: None

MATH320 Linear Programming

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The theory of linear programming as well as applications in which linear programming finds its utility, including operations research/management science, game theory, and graph theory.

Prerequisite: (MATH211)
Corequisite: None

MATH328 Mathematical Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This seminar has featured such topics as the study of the history of mathematics, the impact and potential effects of computers upon society, and the study of mathematics as it occurs with society in the forms of puzzles, games, and other types of recreation.

Prerequisite: None
Corequisite: None

MATH350 Numerical Methods

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to numerical methods in the solution of non-linear equations, systems of linear equations, numerical integration, and numerical differentiation. The course will entail both mathematical rigor and computational aspects of some widely used numerical methods. Commercially produced programs from the IMSL library will be used.

Prerequisite: (MATH243)
Corequisite: None

MATH401 Real Analysis 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a mathematically rigorous introduction to analysis of a real valued function of a single real variable. Mathematical logic, set theory, relevant topological and algebraic properties together with proof techniques are heavily utilized throughout the course. Convergence, Continuity, Differentiation, Integration and their interconnections are studied with mathematical integrity.

Prerequisite: (MATH205 AND MATH243)
Corequisite: None

MATH402 Real Analysis 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of MATH401 - Real Analysis I. Convergence questions regarding sequences and series of real functions are investigated. The Lebesgue integral is defined and its existence and properties are investigated. Several basis theorems about Fourier series are explained and proved. Real-valued functions of several real variables are defined and several related theorems are deduced.

Prerequisite: (MATH401)
Corequisite: None

MATH410 Intro to Topology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is an introduction to the elements of set theory and topology. Topics could include introductory set theory, a detailed study of the real line, topological spaces, metric spaces, functions and continuity, compactness, connectedness, completeness, product spaces, function spaces.

Prerequisite: (MATH401)
Corequisite: None

MATH412 Actuarial Mathematics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Formulation, analysis and interpretation of mathematical models in financial mathematics and interest theory, and how these concepts are applied in calculating present and accumulated interest for various streams of cash flows as a basis for use in: reserving, valuation, pricing,

asset/liability management, investment income, capital budgeting, and valuing contingent cash flows. Financial instruments, including derivatives, and the concept of no-arbitrage are covered. This course covers materials for the second actuarial exam, exam FM.

Prerequisite: (MATH243)

Corequisite: None

MATH415 Student Teaching and Practicum Secondary 1: Mathematics

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

MATH416 Student Teaching and Practicum Secondary 2: Mathematics

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

MATH493 Student Teaching and Professional Practicum 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the first of two capstone experiences (one at each level appropriate to certification areas and grade level ranges) for pre-service teachers through a student teaching experience required for certification in secondary mathematics. Supervised practice in classrooms with certified teachers and regular practicum sessions, according to prescribed guidelines, introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

MATH494 Student Teaching and Professional Practicum 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh]

Provides the second of two capstone experiences (one at each level appropriate to certification areas and grade level ranges) for pre-service teachers through a student teaching experience required for certification in secondary mathematics. Supervised practice in classrooms with certified teachers and regular practicum sessions, according to prescribed guidelines, introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

MATH628 Mathematical Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar has featured such topics as the study of the history of mathematics, the impact and potential effects of computers upon society, and the study of mathematics as it occurs with society in the forms of puzzles, games, and other types of recreation.

Prerequisite: None

Corequisite: None

MILS104 Leadership and Personal Development

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The purpose of this semester is to introduce cadets to fundamental components of service as an officer in the United States Army. These initial lessons form the building blocks of progressive lessons in values, fitness, leadership, and officership. Additionally, the semester addresses "life skills" including fitness, communications theory and practice (written and oral), and interpersonal relationships. Upon completion of this semester, the cadets should be prepared to receive more complex leadership instruction.

Prerequisite: None

Corequisite: None

MILS105 Introduction to Tactical Leadership

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This semester builds upon the fundamentals introduced in the previous semester by focusing on leadership theory and decision-making. "Life skills" lessons in this semester include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion of this semester, cadets should be prepared to advance to more complex leadership instruction concerning the dynamics of organizations.

Prerequisite: None

Corequisite: None

MILS205 Foundations of Tactical Leadership

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Continues student development focusing on officer leadership, principles of tactics, values, ethics, the Officer Corps, and the evolution of the United States Army from Vietnam into the Twenty-First Century.

Prerequisite: None

Corequisite: None

MILS304 Adaptive Tactical Leadership

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The focus of instruction is on building the leadership competence and confidence required of an Army officer through practical application of leadership positions during small unit operations. Involves applying the military decision-making process in planning, preparation and execution of small unit missions and the use of a standard structure and format for relaying that information. The course includes training in physical fitness and general military technical/ tactical instruction.

Prerequisite: None

Corequisite: None

MILS305 Leadership in Changing Environments

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The focus of instruction is on developing specific leader and soldier skills in preparation for attendance at the National Advanced Leadership Camp. Subjects include mission analysis and planning, operations orders, small unit offensive and defensive operations, terrain analysis/ land navigation, combat patrolling and physical fitness.

Prerequisite: None

Corequisite: None

MILS328 Military Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

MILS404 Developing Adaptive Leaders

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The focus is on Leadership, ethics, management, and decision-making process. A study of U.S. Army staff organization at various command levels and the responsibilities of the staffs as a whole and of each staff section. Emphasis is placed on the staff planning sequence. Written and oral military communication skills are also reviewed.

Prerequisite: None

Corequisite: None

MILS405 Leadership in a Complex World

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The course prepares students for commissioning in the U.S. Army. Focus of the course includes study of U.S. national security interests, military justice, and the laws of land warfare. Career planning, military administration, and leadership review are other subjects covered in the final Military Science course before commissioning. The cadets will execute a Battle Staff ride and Capstone exercise.

Prerequisite: None

Corequisite: None

MILS450 Topics in Military Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of topics related to military science within a framework provided by the instructor. Possible topics may include, but are not limited to, contemporary issues in the U.S. military, such as Battle Command, Individual and Collective Training, Leader Development, Military Ethics, Joint Operations, Stability and Support Operations, and Modularity.

Prerequisite: None

Corequisite: None

MRKT200 Intro to Marketing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the business function that directs the distribution of goods and services from producer to consumer. Managerial viewpoint with consumer demand as guiding force is stressed in four basic areas of the marketing mix: produce, place, price, and promotion. Adequacy and efficiency of American marketing are considered along with the social and economic aspects of marketing.

Prerequisite: None

Corequisite: None

MRKT300 Consumer Behavior

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the underpinnings of effective persuasion by examining buying units (e.g., people, family, businesses, and organizations) and the exchange processes involved in acquiring, consuming, and disposing of goods, services, experiences, and ideas. Concepts and research methods from marketing and the social and behavioral sciences are applied to describe and understand decision processes in the context of the global marketplace. Students examine how marketers use consumer data, including demographics, psychographics, geography and usage patterns, in product development, service, promotion, pricing, and distribution channels.

Prerequisite: (MRKT200)

Corequisite: None

MRKT310 Entrepreneurial and Small Business Marketing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the analysis and practice of marketing with limited financial and human resources. Students will learn theory and applications in recognizing opportunities, strategizing, testing, and rolling out launches, as well as marketing their new product or service to banks, venture capitalists, and other potential sources of funding. They will also learn to utilize a wide variety of appropriate no- or low-cost marketing tools.

Prerequisite: (MRKT200)

Corequisite: None

MRKT410 Marketing Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reinforces and extends student knowledge of the theory and application of marketing research. Students will learn how to conduct marketing research (i.e., the systematic and objective process of generating information to aid in making marketing decisions). They will identify what information is required, design the best method for collecting information (both online and off), manage and implement the collection of data, analyze the results and communicate the findings and their implications.

Prerequisite: (MATH107 AND MRKT200)

Corequisite: None

MTEC403 Clinical Microbiology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

MTEC404 Clinical Chemistry

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

MTEC405 Clinical Hematology/Coagulation

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

MTEC406 Clinical Immunohematology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

MTEC407 Clinical Immunology/Serology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

MTEC408 Clinical Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

MUSI101 Introduction to Music

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the vocabulary, the concepts, the techniques, and the style changes which attach to the art music of Western civilization. Representative compositions from all the ages of music history are explored in depth, particular attention being given to the stylistic characteristics of each selection. The major composers of each style period are introduced, and their changing role in society is discussed.

Prerequisite: None

Corequisite: None

MUSI105 Exploring Contemporary Trends in Jazz, Rock, & Musical Theatre

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provide students with the opportunity to develop a structure for future listening experiences in the Rock, Jazz, and Musical Theater idioms. The unique characteristics of each idiom will be explored. The major thrust will be toward helping students develop the means to more logically assess and more independently evaluate these modern idioms as a reflection of contemporary society. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

MUSI106 Voice Methods and Foreign Diction

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the methodology of teaching individuals the art of singing. Students are introduced to various methods of developing solo performers with specific emphasis on foreign diction. In addition to English, specific languages include Latin, Italian, German, French, and Spanish. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

MUSI108 Music Explorations

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduces students to a multi-dimensional approach to music learning. Opportunities for musical creation and development of listening, performance and improvisation skills will be offered through a variety of music experiences, including collaborative performance sessions wherein non-band and non-orchestral instruments are employed. The course is an alternative general education elective for students desiring a non-traditional approach to music learning.

Prerequisite: None

Corequisite: None

MUSI109 Group Piano I

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides an introduction to the piano, supplements the Music Theory sequence by reinforcing theoretical concepts at the keyboard, and prepares music majors for their piano proficiency exams.

Prerequisite: None

Corequisite: None

MUSI110 Introduction to Singing

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A study of choral and vocal literature of various style periods. Emphasis given to musicianship and singing techniques. Activities include a performance with the University Choir once each semester, and solo and small ensemble performance (or a research paper) as part of the class work. Open to all students who can sing in tune as determined by the instructor prior to registration. This course is recommended as a

Prerequisite: None

Corequisite: None

MUSI111 University Choir

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

MUSI112 University Band

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

MUSI113 Percussion Ensemble

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

MUSI114 Jazz/Rock Ensemble

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

MUSI116 Ensemble Small Instrument

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

MUSI118 String Methods - Lower Strings

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching cello and string bass fingerings and bowing techniques. Survey of string playing techniques needed to conduct at the elementary intermediate and advanced levels of ensembles.

Prerequisite: None

Corequisite: None

MUSI119 Woodwind Methods - Concert Winds

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching flute, oboe, and bassoon in a school band/orchestra or private lesson setting, by learning the fundamentals of playing each instrument. This will be accomplished by reading about and also playing each instrument.

Prerequisite: None

Corequisite: None

MUSI120 Music Literature

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides music majors with an introduction to great works from the repertoire of Western Art Music, and to the aesthetic values and technical features which are emblematic of their genres.

Prerequisite: None

Corequisite: None

MUSI121 Applied Music 1

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A concentrated approach to musical performance (voice, piano, etc.) through individual instruction in private lessons. Encompasses playing technique, tone production, sight-reading, performance practice, and interpretation of significant music literature.

Prerequisite: None

Corequisite: None

MUSI122 Applied Music 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

Similar to MUSI121 with twice as much lesson time.

Prerequisite: None

Corequisite: None

MUSI124 Percussion Methods

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides a survey of the performance practice of the percussion family of instruments. Special emphasis is placed on proper techniques for the beginning percussionist in the elementary program and it is expected that students acquire proficiencies in all areas of percussion performance.

Prerequisite: None

Corequisite: None

MUSI128 String Methods - Upper Strings

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching violin and viola via the study of fingerings and bowing techniques. Survey of string playing techniques needed to conduct rehearsals at the intermediate, advanced, and artist-level ensembles.

Prerequisite: None

Corequisite: None

MUSI129 Woodwind Methods - Transposing Winds

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching clarinet and saxophone in a school band/orchestra or private lesson setting by learning the fundamentals of playing each instrument. This will be accomplished by reading about and also playing each instrument.

Prerequisite: None

Corequisite: None

MUSI202 Music for Early Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Deals with (1) experiences in musicality and basic music skill development, (2) strategies, tools, and materials that will encourage musicality in young children, (3) research findings that provide a basis for defining the cognitive, kinesthetic and attitudinal objectives for musical behavior that can be expected of young children, and (4) strategies for developing relationships between musical concepts and their counterparts in other subject areas. Does not fulfill General Education Requirements.

Prerequisite: None

Corequisite: None

MUSI203 Music Theory 1

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Presents basic concepts in music theory, including fundamentals of music notation, basic principles of meter, intervals, major/minor scales, key signatures/circle of fifths, chord structures, melodic structures, and principles of part writing/voice leading using root position and inverted chords. Non-chord tones introduced. Motivic, phrase, and period structures are analyzed. The course will include basic exercises in sight-singing and ear training and also a study of blues, jazz, and other nontraditional idioms.

Prerequisite: None

Corequisite: (MUSI109 AND MUSI206)

MUSI204 Music Theory 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A continuation of Music Theory 1. Basic concepts of traditional harmony are extended and chord vocabulary is enlarged. Partwriting with inverted chords and non-chord tones is studied. Motivic, phrase, and period structures are analyzed. Sight-singing and ear training skills development are continued. Jazz forms, scales, chord structures and notational techniques will be reviewed and expanded upon.

Prerequisite: (MUSI109 AND MUSI203 AND MUSI206)

Corequisite: None

MUSI205 Music Technology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A survey of music software and hardware for the professional musician. Topics include music notation, sequencing and MIDI, audio recording and editing, synthesis, multimedia, and web publishing.

Prerequisite: None

Corequisite: None

MUSI206 Sight Singing

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides music majors with basic sight-singing skills, including the use of solfege, singing of scales and arpeggiated chords and chord progressions, melodies in different clefs, and rhythmic reading.

Prerequisite: None
Corequisite: None

MUSI210 Group Piano II

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

A continuation of MUSI109 Group Piano 1; supplements the Music Theory sequence by reinforcing theoretical concepts at the keyboard, and prepares music majors for their piano proficiency exams.

Prerequisite: (MUSI109)
Corequisite: None

MUSI300 Conducting

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduces the art and craft of conducting. It is a skill-development course which begins with score reading and the use of the baton in presenting basic, standard, patterns, then moves through skill development in areas of progressively greater difficulty. These include the left-hand techniques, expressive gestures, reading large ensemble scores, presenting complex beat patterns, and rehearsal techniques.

Prerequisite: None
Corequisite: None

MUSI301 Music for Elementary Grades

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides experiences in (1) ways of using the activities of listening, moving, singing, playing classroom instruments, and creating music to teach concepts basic to music's structure, (2) strategies for making relationships between music and other subject areas, (3) locating and using resource materials, and (4) participation in clinical teaching situations with peer groups and with children.

Prerequisite: None
Corequisite: None

MUSI302 Applied Instrumental and Choral Conducting

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Development of the fundamental skills acquired in MUSI300. Emphasis will be placed on each participant personally developing a musical leadership methodology based upon creative problem solving. The successful participant will develop cognitive skills and habits which are used in both instrumental and choral rehearsals. Field experiences are an integral part of this course.

Prerequisite: (MUSI300)
Corequisite: None

MUSI305 Jazz Studies

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Addresses cultural diversity and offers historical and musical insights into a style of music other than the traditional Western European tradition. American jazz style will raise student's awareness of unique musical developments within this country. Active listening skills through masterworks drawn from the historical style periods of jazz will be emphasized. Social and technological changes during the past 25 years will be examined in depth to derive possible directions for the future of jazz.

Prerequisite: None
Corequisite: None

MUSI308 Music Marketing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Offers insight into music marketing, its structure, historical economic trends and the impact of technology on business and marketing practices in the music industry. Current trends in music marketing practices, music promotion and management as well as retail sales will be examined. The use of technology including web site design, social networking sites and the distribution of digital media will be explored.

Prerequisite: None
Corequisite: None

MUSI312 Music Before 1750

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Comprises a study of the history and literature of music of the Middle Ages, Renaissance, and Baroque periods. Using representative, period masterpieces, the class will examine the variety of genres, forms, techniques and practices of composition as developed by the major composers in France, Italy, Germany (Austria) and the Franco-Netherlands provinces. A study of the social history and the artistic ideals of the periods and geographic regions, as pertinent to musical development, will be included.

Prerequisite: None

Corequisite: None

MUSI313 Music of the Romantic Period

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the history and literature of music of the 19th century. Includes an examination of the variety of genres, forms, techniques and styles of composition used and developed by major composers representing nations/cultural domains on the European continent from the West across to Russia. Attention is given to the national schools that emerged during this period. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

MUSI314 20th Century Music

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history and literature of music dating from c.1880 to the present. It includes an examination of the various schools and new idioms and ideals that European, North, Central and South American composers have fostered. Emphasis is placed upon the new techniques and innovations that have become part of the musical language of this century. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

MUSI315 American Music

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of the various native composers, compositions, epochs, and musical styles which constitute the history of American music from Colonial times to the present. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

MUSI317 Elementary Music Methods

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Acquisition of the philosophy, skills and knowledge pertinent to designing meaningful and affective/effective instruction in music listening, music performing, and music creation at pre-secondary levels. Field experiences are an integral part of this course.

Prerequisite: (MUSI204)

Corequisite: None

MUSI318 Secondary Music Methods

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the organization and administration of the comprehensive music program in junior/middle and senior high schools. Topics include the study of vocal and instrumental ensemble development, as well as techniques and materials for other types of music classes. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

MUSI319 Symphonic Music

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of music for the symphony orchestra. Examples from several periods, composers, and styles are compared and evaluated. The growth and development of the symphony orchestra and the effect of this growth on the music produced are also considered. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

MUSI322 Music Theory III

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of the Music Theory sequence. Modulation and tonicization by the use of secondary chords and other techniques are reviewed. Chromatic harmony (mode mixture, Neapolitan chords, augmented sixth chords, etc) is explored. The concept of enharmonic modulation is explored, along with extended harmonies and other advanced harmonic techniques common to the late 19th century. Jazz chord structure and notation will be reviewed and expanded upon. There will be an introduction and overview of standard musical forms.

Prerequisite: None

Corequisite: None

MUSI323 Music Theory IV

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of the Music Theory sequence Enharmonic/"distant" sequence. Enharmonic/"distant" modulation, extended harmonies, nontraditional scales, chord planning, etc are studied leading to an overview of non-tonal harmonic procedures. Musical form is studied in detail. Jazz chord structure and notation will be reviewed and expanded upon, as well as common jazz scales, forms, and improvisational techniques.

Prerequisite: None

Corequisite: None

MUSI325 Classroom Measurements and Assessments

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides a basis for developing professional competencies, emphasizing the selection, development, interpretation and use of a wide range of assessment instruments appropriate to different types of learning goals and educational purposes. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

MUSI326 Brass Methods - Lower Brass

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides music concentration majors with historical, pedagogical, and performance practice experiences on the low brass instruments (trombone, baritone/euphonium, and tuba). It will provide students with a basic knowledge of playing and teaching techniques and low brass literature.

Prerequisite: None

Corequisite: None

MUSI328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar will provide a general survey of music as it is used in the daily lives of various ethnic groups. The study will enable the student to (1) understand the ways in which folk and ritual music represent a particular ethnic group, (2) recognize and distinguish the sounds of representative styles of ethnic music, and (3) develop techniques for the study of ethnic music that will enable the student to carry out independent research. Fulfills humanities seminar in Liberal Arts. Does not fulfill General Education Fine Arts Requirement.

Prerequisite: None

Corequisite: None

MUSI330 Advanced Studies in Music

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3sh]

Assists and guides the student in pursuing a topic or project in a highly specialized area of music as determined by both the instructor and the student. Specific areas of study would be those not covered through standard course offerings.

Prerequisite: None

Corequisite: None

MUSI336 Brass Methods - Upper Brass

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides music concentration majors with historical, pedagogical, and performance practice experiences on the high brass instruments (French horn and trumpet). It will provide students with a basic knowledge of playing and teaching techniques and high brass literature.

Prerequisite: None
Corequisite: None

MUSI340 Music Theory IV/Orchestration and Music Technology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides music majors with knowledge of the rudiments of orchestration, including ranges, keys, and clefs of different instruments; the timbral qualities of combinations of instruments; and the historical practice of orchestration by past masters.

Prerequisite: (MUSI205 AND MUSI300 AND MUSI323)
Corequisite: None

MUSI343 Music Theory V/Orchestration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None
Corequisite: None

MUSI493 Student Teaching and Professional Practicum: Elementary Music Education

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides a capstone experience for pre-service teachers through the student teaching experiences in an elementary school setting. Supervised practice in classrooms with certified teachers, and regular practicum sessions introduce students to the range and scope of professional educator's responsibilities. Field experiences are an integral part of this course.

Prerequisite: None
Corequisite: None

MUSI494 Student Teaching and Professional Practicum: Secondary Music Education

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides a capstone experience for pre-service teachers through the student teaching experiences in a secondary school setting. Supervised practice in classrooms with certified teachers, and regular practicum sessions introduce students to the range and scope of professional educators' responsibilities. Field experiences are an integral part of this course.

Prerequisite: None
Corequisite: None

MUSI615 American Music

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will focus on the various native composers, compositions, and styles which constitute the history of American music from the Colonial times to the present. Content will survey mainstream styles of serious American art music, folk music, and popular music. Units of study will encompass music of Native Americans, Afro-Americans, and Latin Americans.

Prerequisite: None
Corequisite: None

MUSI628 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Music Seminar

Prerequisite: None
Corequisite: None

NURS101 Nursing 1

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8 sh]

Introduces the student to nursing, person and health, which are basic concepts to the practice of nursing. Emphasis is placed on communicative and observational skills that permit the assessment of the basic needs of individuals and their families. The study of the human needs of individuals provides a foundation for inquiry into the nurse's role in providing nursing care based on the nursing process.

Prerequisite: None
Corequisite: None

NURS102 Nursing 2

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8sh]

A continuation of Nursing 101, Nursing I, focuses on human needs according to Maslow. The course addresses the individual's needs related to activity/rest, safety/security, oxygen/carbon dioxide exchange, love/belonging, and psychosocial well being. Emphasis is placed on communication, and teaching/learning skills as an essential part of the nursing process in the care of individuals and families. The family during the childbearing years and during the first year of life is studied in order for the student to develop beginning competencies in those technical skills necessary to carry out the nursing care plan for individuals of all ages and in selected health care settings.

Prerequisite: (NURS101)

Corequisite: None

NURS201 Nursing 3

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8 sh]

An in-depth study of the human needs according to Maslow with emphasis on the application of the nursing process as the foundation for nursing care. Communication and health teaching are integrated as major strategies for assisting individuals and families to care for themselves in health and illness. Levels of wellness and alterations in human needs are studied as the course focuses on individual needs relating to nutrition/elimination, love/belonging, and psychosocial well being.

Prerequisite: None

Corequisite: None

NURS202 Nursing 4

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8 sh]

An extension of NURS201 - Nursing III. Continues to increase the knowledge base of human needs with application of the nursing process to individuals and families with alterations in their level of health. Communication and health teaching are integrated as major strategies for assisting individuals and families to care for themselves in health and illness. Levels of wellness and alterations in human needs are studied as the course focuses on individual needs relating to sexuality, oxygen/carbon dioxide exchange, safety/security, and activity/rest.

Prerequisite: (NURS102 AND NURS201)

Corequisite: None

NURS205 Nursing Field Experience

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

This elective field experience course will be offered in the Summer annually after satisfactory completion of Nursing 101 and 102. This experience will allow the student to pursue a personal interest in an area of nursing. Potential areas that may be utilized include: Emergency Department (ED/ER); Intensive Care (CPU, ICU, NICU); Medical/Surgical (Med.-Surg.); Obstetrics/Gynecology (OB-GYN); Operating Room (OR, PARR); Pediatrics (PEDS); Clinics with Nurse Practitioners; Community Health Agencies. Levels of wellness and alterations in human needs will be studied. Communication and health teaching will be utilized by the students as major strategies for assisting individuals and families to care for themselves in health and illness. NOTE: This course may not be substituted for a required course within the A.S.N. program.

Prerequisite: None

Corequisite: None

NURS305 Nursing Informatics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to applications of informatics systems in nursing practice and education. Integrates various theories, assisting students to develop skills for information literacy in the context of communication, self-expression, social control in a diverse society, and in the use of electronic patient records and tele-health. Provides an introduction to technology in nursing. Learning experiences provide for the development of baseline informatics and verbal and nonverbal professional communication styles needed in the healthcare delivery arena.

Prerequisite: None

Corequisite: None

NURS310 Foundations for Professional Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A seminar course focused on the theoretical foundations of professional practice and theory development in nursing.

Prerequisite: None

Corequisite: None

NURS315 Pathophysiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Studies the physiologic mechanisms altered by illness, injury, or disease processes in humans throughout the life span. Fundamental disease processes, specific illnesses, and their effects on homeostasis as well as the links between pathophysiology, diagnosis, and therapeutic interventions are emphasized. Students will critically analyze diverse client presentations of selected illnesses for symptomatology, pathophysiology, and health care implications.

Prerequisite: None

Corequisite: None

NURS320 Health Assessment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on identification and demonstration of advanced assessment techniques with emphasis on normal and abnormal findings throughout the life span. Learning experiences provide for development of a systematic approach to physical assessment to facilitate integration of assessment findings and major health deviations. Principles of therapeutic communication will be emphasized as an adjunct to performing a health assessment.

Prerequisite: None

Corequisite: None

NURS325 Pharmacology for Nursing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide an overview for nurses of drug therapy integrating the use of the nursing process in pharmacokinetics. The emphasis is to provide a big picture approach to the systemic use of drugs in the treatment and or management of diseases.

Prerequisite: None

Corequisite: None

NURS350 Care of the Critically Ill

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Provides fundamental information about the nursing care of clients across the life span in critical care settings. Clinical activities will focus on advanced concepts of critical care related to multi-organ/system function and dysfunction.

Prerequisite: (CHEM111 AND HLTH415 AND NURS315 AND NURS320) OR (HLTH415 AND NURS315 AND NURS320 AND RECR205)

Corequisite: None

NURS410 Nursing: Home, Community and Public Health

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Reviews current and evolving roles of home health, community and public health nurses. Health promotion, health teaching, economic, political, legal and ethical influences, environmental issues, epidemiology, communicable diseases and vulnerable populations are addressed. Focus is on the application and integration of health and wellness concepts.

Prerequisite: (NURS310 AND NURS320)

Corequisite: None

NURS420 Nursing Leadership and Management Practice

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A capstone nursing course with focus on leadership and management issues in health care. Seminars provide opportunities for students to share commonalities and unique aspects of their practical experiences in nursing . Course culminates in a concentrated external experience in an area and agency selected by the student.

Prerequisite: (NURS310)

Corequisite: None

NURS430 Nursing: Contemporary Issues, Policy and Politics

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Exploration of policy and politics, strategies of policy development and political action, and application of such strategies in four spheres: workplace, government, organizations, and community. Focuses on the political roles and responsibilities of professional nurses in efforts to discuss unresolved issues of interest to nurses, their colleagues, and consumers of health care.

Prerequisite: (NURS420)

Corequisite: None

NURS498 Health Science Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An analysis and/or comparison of topics related to health science within a framework provided by the instructor. Examples include but are not limited to contemporary issues in healthcare, a comparative analysis of healthcare systems in different countries, health issues related to population, economics, social and other factors, healthcare issues of special populations, the healthcare crisis in the United States, and emerging healthcare technologies and fields.

Prerequisite: None

Corequisite: None

PHAP100 Introduction to Nanoscience

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to introduce aspects of nanotechnology and its applications to science, medicine and industry. This course presents this evolving field and discusses potential future influence in everyday life. Course includes tours of the nanofabrication facilities at Lock Haven University and Pennsylvania State University.

Prerequisite: None

Corequisite: None

PHAP201 Materials, Safety and Equipment Overview for Nanofabrication **(Nanotechnology Center/PSU)******

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an overview of basic Nanofabrication processing equipment and material chemistry and handling procedures. The focus is on cleanroom protocol, safety, environmental and health issues in equipment operations and material handling.

Prerequisite: None

Corequisite: None

PHAP202 Basic Nanofabrication Process **(Nanotechnology Center/PSU)******

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an overview of basic processing steps in Nanofabrication (contact lithography, basic etching and deposition techniques). The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures.

Prerequisite: None

Corequisite: None

PHAP203 Thin Films in Nanofabrication **(Nanotechnology Center/PSU)******

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course covers advanced thin film deposition and etching practices in Nanofabrication. Students will receive hands-on experience in depositing and etching dielectric, semiconductor, and metallic materials using state-of-the-art tools and practicing many of the steps critical to Nanofabrication of semiconductor devices including microelectronics, MEMS devices, display structures, and structures used in biotechnology fields.

Prerequisite: None

Corequisite: None

PHAP204 Advanced Lithography and Dielectrics for Nanotechnology **(Nanotechnology Center/PSU)******

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This course covers all aspects of advanced lithography from design and mask fabrication to pattern transfer and inspection. It will cover all aspects from substrate preparation to exposure with emphasis on systems and techniques that define patterns and illumination schemes as well as e-beam, X-ray and ion beam lithography. Engineering dielectrics are also discussed.

Prerequisite: None

Corequisite: None

PHAP205 Materials Modification in Nanofabrication **(Nanotechnology Center/PSU)******

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will cover in detail the processing steps used in modifying material properties in Nanofabrication. It is also an intensive study of metals, dielectric materials including their mechanical, optical and electrical characteristics that gives the student further insight into advanced device fabrication.

Prerequisite: None

Corequisite: None

PHAP206 Characterization, Packaging and Testing Nanofabricated Structure ** (Nanotechnology Center/PSU)******

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course examines a variety of techniques and measurements essential for controlling device fabrication and final packaging. It will also examine mechanical and electrical characteristics of nanostructures for biological/biomedical applications including the manufacture of micro fluidic channels for biological analysis.

Prerequisite: None

Corequisite: None

PHAP300 Thin-film Science and Technology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Designed to teach the fundamentals of thin-film science and technology including fabrication, characterization of the thin-film structures and their optical, mechanical, electromagnetic properties. It will also address some aspects of low dimensional structures, including both the conceptual principles and experimental techniques of nanoscale science, such as refractive index engineering, dynamical light scattering, photonics, luminescence mechanism for doped nanomaterials, three dimensional nanostructures, active nanostructures, and functional devices.

Prerequisite: (PHYS170 AND PHYS171)

Corequisite: None

PHAP410 Material Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces fundamental physical phenomena related to solid state materials. Covers the mechanical, electrical, magnetic, optical and thermal properties of solid state materials, as well as defects in solids and how they influence the materials' properties. The applications emphasized in this course concern the developments of nanomaterials and nanostructures. Pre- or co-requisite: PHYS315 and PHYS370

Prerequisite: None

Corequisite: (PHYS315 ANDPHYS370)

PHAP431 Advanced Applied Physics Laboratory

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Experimental work drawn from an undergraduate foundation in physics including areas of current research particularly in nanotechnology. Experimental methods and analysis are used, with emphasis on independence and individual initiative in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: (PHYS315)

Corequisite: None

PHIL101 Problems in Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces a number of fundamental philosophical problems traditional to philosophy. Primary emphasis is on problems of knowledge, introduced through analysis of the works of several major philosophers. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL102 Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to moral philosophy. Considers the problems of values, ideals, and standards of human action, both individual and social. Selected readings in a wide range of traditional and modern ethical approaches. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL105 Philosophy of Religion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basic problems of religion, such as the nature of religion, the existence of God, knowledge of God, the language of religion, immortality, and eschatology. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL106 Social & Political Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of the traditional and contemporary philosophical issues of man in society, especially those problems concerning justice which exist as a result of human government. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL110 Critical Thinking

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on creating in students an understanding of the many facets and pitfalls of good and bad reasoning. Emphasis is divided between the theoretical, logical issues and the practical application of good reasoning in a wide variety of contexts, both personal and public. This course does not meet the philosophy general education requirement.

Prerequisite: None

Corequisite: None

PHIL201 Classical Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of philosophy from Thales to Plotinus, covering the Greek and Roman periods. Major emphasis on Plato and Aristotle. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL202 Medieval Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the development of philosophy from Augustine in the fourth century A.D. to William of Ockham in the 14th century. Special emphasis is placed on Augustine and Aquinas. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL205 Contemporary Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major movements in the philosophy of the 20th century. Considers idealism, Neo-Thomism, Marxism, Phenomenology and Existentialism, Logical Positivism, Linguistic Analysis, and Naturalism. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL206 American Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A general study of philosophy in the U.S. since the middle of the 19th century. The emphasis is upon the works of those philosophers of this country who have developed themes peculiarly American. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL207 Asian Philosophies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the major schools of Indian and Chinese philosophy which developed out of Hinduism, Buddhism, Taoism, and Confucianism. The emphasis will be on the metaphysical, epistemological, and ethical insights of the various systems. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL210 19th Century Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the major European and American philosophers of the 1800's, including Hegel, Marx, Mill, Schopenhauer, Nietzsche, Kierkegaard, and James. Emphasis will be placed on the influence of these thinkers on contemporary thought. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL215 Canadian Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces Canadian Philosophy and sets forth Canadian Philosophy as a distinct system of inquiry. In particular, close attention will be paid to the relationship between Canadian philosophy and Canadian intellectual history. Particular focus will be placed on the philosophical notion of community and its impact on Canadian society. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL301 Philosophy of Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An investigation of the nature and techniques of scientific explanation. Study of such questions as the nature of scientific method, the logic of scientific explanation, theory construction, causality, and the nature of the laws of science. Primary emphasis on the philosophical questions involved in the work of science and the link between science and philosophy. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL304 Existentialism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of how 20th century existentialism, both in its religious and its atheistic forms, grows out of the work of its three 19th century precursors: Kierkegaard, Nietzsche, and Dostoevsky.

Prerequisite: None

Corequisite: None

PHIL305 Metaphysics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the most general questions concerning the nature of reality including such problems as the reality of an external world, the significance of human existence, the nature of time, space, substance, cause, and the status of natural laws.

Prerequisite: (PHIL***)

Corequisite: None

PHIL306 Theory of Knowledge

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the basic problems of epistemology, such as the nature, the reliability, and the proper objects of knowledge. Considers questions pertaining to the nature of truth, theories of perception, the problems of universals, concepts, and categories.

Prerequisite: None

Corequisite: None

PHIL308 Logic

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Standard logical notions and techniques. Chief emphasis on forms of argument, modes of valid inference, traditional and modern approaches to deductive argument, and inductive theory. Syllogistic and mathematical logic. The course does not meet the philosophy general education requirement.

Prerequisite: None

Corequisite: None

PHIL315 Philosophy of Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The exploration of such broad questions as What is law?, How are law and morality related?, and How should we best conceptualize legal reasoning? Specific topics might include, among others, legal theories, equality, rights and freedoms (speech, religion, etc), civil disobedience and violence, and gender and race in the American legal and social context.

Prerequisite: (ENGL100) OR (HONR111) OR (PHIL***)

Corequisite: None

PHIL328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar is intended to familiarize students with the questions that philosophers and individuals have always asked and to help them realize that, although the answers change, the questions remain the same. Different aspects and questions may be dealt with in several philosophy seminars.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

PHIL400 Ethics and the Environment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores philosophical questions related to the human relationship with, and use of, the environment. Topics may include preservation vs. conversation, holistic ethics, anthropocentrism, wilderness, feminist approaches to environmental ethics, Deep Ecology, radical environmental activism, and environmental justice. Emphasis is given to Western ethical traditions, though other perspectives may be included.

Prerequisite: None

Corequisite: None

PHIL415 Ethical Issues in the Health Care Professions

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of some of the major ethical issues in the various health care professions. Particular analysis will include, but not be limited to the following: the allocation of medical resources; consent and truth telling in medicine; genetic engineering; reproductive technologies; and advanced directives. Professionals from various health care fields will be invited to speak on selected topics.

Prerequisite: None

Corequisite: None

PHIL425 Ethics in Business & Industry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An in-depth survey of the relevance of ethical theory to the making of professional decisions in business and industry. An extensive introduction to ethical theory and logic is followed by a discussion of difficult ethical dilemmas that professionals must confront every day. Emphasis is placed on hiring and firing practices, advertising and marketing, environmental issues, and the impact of industry on society at large. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHIL615 Ethical Issues in the Health Care Professions

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of some of the major ethical issues in the various health care professions. Particular analysis will include, but not be limited to the following: the allocation of medical resources; consent and truth telling in medicine; genetic engineering; reproductive technologies; and advanced directives. Professionals from various health care fields will be invited to speak on selected topics.

Prerequisite: None

Corequisite: None

PHIL620 Bio-Medical Ethics: An Overview

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The purpose of this course is to provide an overview of some of the major ethical issues in medicine and possible approaches to resolving ethical dilemmas in that context. Particular attention will be given to the following topics: the allocation of medical resources, consent and truth telling in medicine, confidentiality, and advanced directives.

Prerequisite: None

Corequisite: None

PHIL625 Ethics in Business & Industry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth survey of the relevance of ethical theory to the making of professional decisions in business and industry. An extensive introduction to ethical theory and logic is followed by a discussion of difficult ethical dilemmas that professionals must confront every day. Emphasis is placed on hiring and firing practices, advertising and marketing, environmental issues, and the impact of industry on society at large.

Prerequisite: None

Corequisite: None

PHIL690 Current Philosophies of Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the philosophies of education that have had an impact on education today. The works of educational philosophies and critiques of their positions will be read and discussed. The implications for today's educational experiences will be discussed.

Prerequisite: None

Corequisite: None

PHYS101 Matter & Energy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the underlying physical principles of energy generation and consumption. Topics include the atomic and subatomic structure of matter, forms of energy, energy conservation, thermodynamics, heat engines, electromagnetic induction, radioactivity, nuclear reactors, nuclear fusion, solar radiation, solar collectors, gravitational force, and tidal power. Knowledge is achieved using scientific inquiry methods - conceptual understanding, laboratory exercises, and activities developing the skills for quantitative evaluation of processes. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PHYS102 The Mechanical Universe

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces what is traditionally called Newtonian Mechanics including one- and two-dimensional motion, Newton's Laws, momentum, energy, and circular and simple harmonic motion. The course employs a laboratory-first, inquiry-oriented format that places emphasis on the investigation of problems in the physical world with the results of investigations being used to drive further instruction.

Prerequisite: None

Corequisite: None

PHYS105 Engineering Graphics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Use and care of drawing instruments; proper weights and types of lines for clear-cut, and complete graphics representation; useful geometrical construction; lettering; freehand sketching, orthographic projection; auxiliary and sectional views; pictorial representation with emphasis on isometric drawing; dimensioning; true lengths and shapes. Emphasis on practical application and development of the ability to think in three dimensions. (Prior to fall 2005, course was 2.0 sh)

Prerequisite: None
Corequisite: None

PHYS110 How Things Work

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The student is introduced to the current understanding of the physical universe in terms of fundamental principles of physics. Basic concepts are studied and related to common phenomena and application found in everyday life as well as more exotic phenomena one may come across in the news or popular-science media. In the laboratory component of this course, the student will gain hands-on experience with principles of physics and use of the scientific method. Fulfills general education natural science requirement.

Prerequisite: None
Corequisite: None

PHYS130 Physics 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Introductory mechanics, heat and sound. The mechanics of solids, liquids and gases; thermometry; calorimetry; heat transfer, the production and nature of sound waves, including musical sounds. Fall semester each year, and Summer sessions of even years.

Prerequisite: (MATH113) OR (MATH141) OR (MATH142) OR (MATH243) OR (MATH244) OR (MATH135)
Corequisite: None

PHYS131 Physics 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Introductory magnetism and electricity, reflection and refraction; optical instruments, spectra, and interference. Spring semester each year, and Summer sessions of even years.

Prerequisite: (PHYS130)
Corequisite: None

PHYS135 Meteorology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to meteorology through the systematic study of the atmosphere including composition and structure. Analysis of the laws and underlying principles of the atmospheric change and motion. The origin and development of weather features and their significance in weather forecasting. Study of global weather features and climate and climate change. Fulfills General Education Lab Science Requirement

Prerequisite: None
Corequisite: None

PHYS140 Astronomy of the Solar System

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the methods and discoveries of astronomy focusing on the solar system. Fulfills General Education Requirements.

Prerequisite: None
Corequisite: None

PHYS170 Intermediate General Physics 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to motion, sound, and heat employing the methods of calculus and vector analysis. Co-requisite: MATH141.

Prerequisite: None
Corequisite: (MATH141)

PHYS171 Intermediate General Physics 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to electricity, magnetism and optics employing the methods of calculus and vector analysis. Co-requisite: MATH142

Prerequisite: (PHYS170)
Corequisite: (MATH142)

PHYS250 Heat

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intermediate course in heat. More intensive development of basic concepts and principles in the study of the properties of gases and in thermodynamics. Temperature measurements, expansivity, specific heats, thermal conductivity of solids and liquids, thermal properties of gases, changes of phase, and heat engines.

Prerequisite: (PHYS130) OR (PHYS170)

Corequisite: None

PHYS290 Electronics

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Introduces the analysis of linear electric circuits including nodal and mesh analysis, network theorems and their applications for direct-current circuits, transient circuits, and AC steady state analysis. Uses linear algebra, differential equations, and complex variables for circuit analysis. Incorporates the concept of building linear models for electronic components for the case of operational amplifiers and diodes. Develops practical skills for circuit simulation using computer software, assembling electronic circuits, and performing basic electrical measurements.

Prerequisite: (PHYS171)

Corequisite: None

PHYS310 Physics Lab Development & Supervision

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 2 sh]

Supervised experience in development and supervision of physics laboratory activities. Will include opportunity to design, develop, and construct laboratory and demonstration apparatus in physics, and to conduct laboratory classes under direct supervision of a physics faculty member. Offered by individualized instruction.

Prerequisite: (PHYS171)

Corequisite: None

PHYS314 Atomic & Nuclear Physics w/o Lab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to modern physics: atomic structure and spectra, radiation, wave and particle aspects of matter, quantum theory, radioactive decay, nuclear reactions, nuclear structure, elementary particles. Does not include a laboratory.

Prerequisite: None

Corequisite: None

PHYS315 Modern Physics

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to modern physics: atomic structure and spectra, radiation, wave and particle aspects of matter, quantum theory, radioactive decay, nuclear reactions, nuclear structure, elementary particles.

Prerequisite: (MATH243 AND PHYS131) OR (MATH243 AND PHYS171)

Corequisite: None

PHYS325 Optics

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An intermediate course in optics. Geometrical and physical optics, reflection and refraction at surfaces, lenses, interference and diffraction, elementary spectroscopy and polarization of light. Applications to the study of optical instruments.

Prerequisite: (MATH243 AND PHYS131) OR (MATH243 AND PHYS171)

Corequisite: None

PHYS328 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The seminar explores various topics in the physical sciences with an emphasis on physics. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

PHYS331 Mechanics 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Continuation of Mechanics with an emphasis on the variational methods of Lagrangian and Hamiltonian formalisms. Topics include generalized coordinates, symmetries, central forces, Euler's equations, normalized coordinates, strings and vibrations, and mechanics of rigid bodies in three dimensions.

Prerequisite: (PHYS330)

Corequisite: None

PHYS345 Mathematical Methods of Physics

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduces the mathematical techniques of theoretical physics. This introduction will include the partial differential equations and boundary value problems associated with wave motion, the diffusion of heat and quantum mechanical probability, and electromagnetic potentials and fields.

Prerequisite: None

Corequisite: None

PHYS350 Quantum Mechanics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced undergraduate level introduction to the principles, formalism and results of quantum mechanics; including: historical background, Schrodinger equations, particle in box, harmonic oscillator, one dimensional crystals, hydrogen atom, angular momentum, light, introduction to perturbation theory.

Prerequisite: (MATH244 AND PHYS315)

Corequisite: None

PHYS370 Electricity & Magnetism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intermediate course in electricity and magnetism focusing on Maxwell's equations and their properties. The course will concentrate on the concepts associated with electromagnetic fields and will introduce the mathematics used for their description.

Prerequisite: (MATH142 AND PHYS171)

Corequisite: None

PHYS371 Electrodynamics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of electricity and magnetism that emphasizes fields within materials, electromagnetic radiation, and methods of solving static and dynamical problems.

Prerequisite: None

Corequisite: None

PHYS391 Problems in Physics

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4sh]

Independent study and research under the direction of the Physics staff. For advanced students, who may register for the course more than once. Each semester.

Prerequisite: None

Corequisite: None

PHYS431 Advanced Physics Laboratory

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 3 sh]

Experimental work drawn from an undergraduate foundation in physics including areas of current research. Sophisticated experimental methods and analysis will be used, with emphasis on independence and individual initiative in the planning, execution, and presentation of research. A student may repeat for credit.

Prerequisite: (PHYS315)

Corequisite: None

PHYS628 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in the physical sciences with an emphasis on physics. Students are expected to research and develop knowledge on subjects discussed in the seminar, where the expertise of the instructor is used to explain and interpret the more technical aspects. Students will participate in class discussions using a knowledge base formed in part by class assignments. Students will give presentations to the class. Specific topic selection is based upon the expertise and interest of the designated science faculty. Examples include: Biographies of 20th Century Physicists, Science in the 20th Century, Pseudoscience, Science and Science Fiction, and Popularization of Science.

Prerequisite: None

Corequisite: None

PLGL210 Legal Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Writing and correctly citing legal briefs, memoranda and letters constitute the primary content. Considerable attention given to grammar, style and organization.

Prerequisite: None

Corequisite: None

PLGL305 Legal Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers the process of researching legal matters through the use of reporters systems, state and federal codes, Shepard's, legal dictionaries, law digests, legal encyclopedias, Lexis/Westlaw and related materials.

Prerequisite: (PLGL300)

Corequisite: None

PLGL310 Tort Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers reading, briefing and analyzing tort case law; aspects of negligence such as duty, breach, causation, defenses and damages; defamation; malpractice; strict liability; product liability; intentional torts; misrepresentation; vicarious liability; joint liability; insurance; automobile insurance; and bad faith.

Prerequisite: None

Corequisite: None

PLGL400 Civil Litigation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers court rules, the litigation process, discovery, interrogatories, affidavits, depositions, interviewing, evidence and investigation, service of process, motions, answers, pleadings, alternative dispute resolution, obtaining a default judgment, testing law suits, trial preparation and related matters.

Prerequisite: (PLGL300 AND PLGL305)

Corequisite: None

PLGL405 Criminal Law Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers Constitutional law, the incorporation doctrine, search and seizure, self incrimination, electronic eavesdropping, probable cause, the exclusionary rule, stop and frisk, right to counsel, suspect identification, interrogation, bail, entrapment, related matters, and the role of the paralegal in such matters.

Prerequisite: (PLGL300)

Corequisite: None

PLSH101 Polish 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None
Corequisite: None

PLSH102 Polish 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None
Corequisite: None

PLSH201 Polish 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None
Corequisite: None

PLSH202 Polish 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None
Corequisite: None

PLSH328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None
Corequisite: None

POLI105 American National Government

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The general principles, structure and functions of the American federal government. The rights and duties of citizenship, civil rights, political parties, special interest groups. The growing importance of the regulatory functions of government. Fulfills General Education Requirements.

Prerequisite: None
Corequisite: None

POLI107 World Politics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students are introduced to the fields of international relations, foreign policy and international political economy. The course reviews the evolution of the current international system and introduces basic theories and models used by political scientists and others in analyzing world politics. Primary emphasis is placed on the evolving post-Cold War "World Order" and the major issues confronting it. Fulfills General Education Requirements.

Prerequisite: None
Corequisite: None

POLI200 Introduction to Political Inquiry and Action

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prepares students for advanced study in political science by introducing the various modes of political inquiry, competing theories of democracy, and the range of methods and information resources used in the study of politics and public policy.

Prerequisite: (POLI101) OR (POLI105) OR (POLI107)

Corequisite: None

POLI210 State & Local Government

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the political process, governmental institutions, and the politics of governing at the state and local levels today. Special effort will be made to examine Pennsylvania examples. Fulfills political science/economics general education requirement.

Prerequisite: None

Corequisite: None

POLI230 Political Parties & Elections

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an intermediate level undergraduate course intended to build upon knowledge acquired in introductory courses in political science. The course examines the role function of political parties and electoral processes in the U.S. and elsewhere. In broader terms, the course explores the theoretical and practical linkages among political parties, electoral processes, and the development and maintenance of representative democracy.

Prerequisite: (POLI101) OR (POLI105)

Corequisite: None

POLI250 US Foreign Policy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An examination of the nature of foreign policy, the manner in which foreign policy is formulated and executed in a democracy, and the objectives and limits of U.S. Foreign Policy. Emphasis is placed on U.S. Foreign Policy since 1945.

Prerequisite: None

Corequisite: None

POLI260 Intro Public Administration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of governmental administration in the U.S. with particular emphasis on the national government. Organization and management, budgeting, personnel, planning and public relations.

Prerequisite: None

Corequisite: None

POLI301 Comparative Government

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the methods and scope of the comparative study of government, and an examination of political systems in selected countries with a focus on well established industrialized system.

Prerequisite: None

Corequisite: None

POLI302 Business Law 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Familiarizes the student with the fundamental principles of business law as they relate to the development and application of common, general, criminal and property law as well as contract arrangements. Much of the course will involve the study and analysis of significant cases in each of the aforementioned legal areas.

Prerequisite: None

Corequisite: None

POLI305 Congress and the Presidency

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the nature of the relationship and interdependencies between the Congress and the Presidency of the United States. Focuses on the constitutional powers of these respective institutions of American national government. Substantive areas that will be examined include, but are not limited to: the historic origins of federalism and the separation of powers model of American Constitutionalism; the changing role(s) and functions of the respective institutions regarding domestic and foreign policy; the electoral processes that shape and

influence Congressional and Presidential decision-making; the impact and consequences of the rise of the federal bureaucracy in the U.S.; and the social, political, and economic forces that have shaped contemporary Congressional and Presidential relations.

Prerequisite: None

Corequisite: None

POLI308 African Politics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey and analysis of African politics. Provides a grounded understanding of the various contextual stages (pre-colonial, colonial, post-colonial, and post-post-colonial) that have shaped and continue to influence African politics and policy.

Prerequisite: None

Corequisite: None

POLI310 Criminal Justice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of the institutions and processes by which criminal justice decisions are made, with emphasis on their legal and political aspects. The roles and interactions of law and rights, prosecution and defense, courts, police, and correctional institutions. Focus on the conflicting values and principles underlying criminal justice.

Prerequisite: None

Corequisite: None

POLI312 Media and Politics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the effects of the media (print, broadcast, electronic, and film) on political behavior in the American political system.

Prerequisite: None

Corequisite: None

POLI315 Politics in Developing Nations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will be introduced to the most prominent theories of political development and the major political, economic, and social issues common to developing nations.

Prerequisite: None

Corequisite: None

POLI320 Latin American Politics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Study of selected Latin American political systems in the 20th century, analyzing the impact of cultural and socio-political forces on modernization and political development. Through the study of several cases, students will develop an understanding of the historical roots of issues facing Latin America today.

Prerequisite: None

Corequisite: None

POLI322 International Political Economy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to international political economy, the study of the interaction of politics and economics in the international system. Includes discussion of how politically motivated policies and dynamics influence economic activity and how economic interests and calculations influence political events. Highlights the impact of international economic dynamics and institutions on domestic political, economic, and social conditions as well as the influence of domestic political structures and economic interests on the international system.

Prerequisite: None

Corequisite: None

POLI325 Labor-Management Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will introduce students to the general field of labor-management relations. The focus will be on the issues which face workers and employers in the U.S. labor markets, especially those issues to be resolved through collectively bargained contracts between employees and management.

Prerequisite: None

Corequisite: None

POLI328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

POLI335 Politics of Global Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores the relationship between global health and social and economic development. Students will learn about key players in international health-UN agencies, Ministries of Health, and Non-governmental Organizations. Students will consider the impact that political action has on the health and well being of individuals. The course will be global in scope but with a special emphasis on health problems affecting people in the developing world.

Prerequisite: None

Corequisite: None

POLI350 International Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of current diplomatic, economic, and political problems as they affect the balance of power, disarmament, the East-West struggle, the United Nations and the emerging states of Africa and Asia.

Prerequisite: None

Corequisite: None

POLI370 United Nations & International Organizations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A rapid survey of the history of international organizations prior to the United Nations and an intensive study of the United Nations. Emphasis upon the purposes, principles, membership, structure, and functions of the U.N. Attention to other international organizations for such purposes as mutual security, disarmament, and the pacific settlement of international disputes.

Prerequisite: None

Corequisite: None

POLI380 Constitutional Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Analysis of the American constitutional system and its principles, with emphasis upon the Constitution, the Supreme Court, and judicial review. Constitutional principles, as applied by the Courts, to Congress, the President, federalism, state powers, and civil liberties.

Prerequisite: None

Corequisite: None

POLI381 Law and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of American legal institutions and process. Common law, statutory law, administrative law, and constitutional law. The majority of the substantive materials in the course will be drawn from issues involving freedom of expression.

Prerequisite: None

Corequisite: None

POLI390 Political Theory 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The history of Western political thought from the Greeks through the 18th century. Theories pertaining to the nature of the state and the legitimate objectives of governments: authority, sovereignty, law, liberty, etc.

Prerequisite: None

Corequisite: None

POLI391 Political Theory 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an advanced elective course in political theory focusing on major issues in 20th century political philosophy. An understanding of the Western tradition of political theory developed in POLI390 will be used as the background for a survey of major ideologies and for an in-depth exploration of three philosophic issues: freedom, equality, and democracy.

Prerequisite: None

Corequisite: None

POLI400 Junior/Senior Research Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an advanced course in political science research. It provides the upper-level political science major with practice in the use of various research tools as part of a semester-long individual research project. The specific substantive focus of the course will vary, depending on the instructor.

Prerequisite: None

Corequisite: None

POLI405 Senior Capstone Management Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The seminar is intended to be an educational experience in which specialized skills and concepts introduced in individual courses in the major are integrated through investigation and discussion of broader issues in management.

Prerequisite: None

Corequisite: None

POLI628 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

POLI630 Public Policy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An upper-level course on the study of public policy. Includes an overview of the epistemological and methodological issues surrounding the study of public policy as they are viewed from different ideological perspectives. In addition the course provides an in-depth study of public policy related to poverty and welfare in the U.S.

Prerequisite: None

Corequisite: None

POLI650 International Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of current diplomatic, economic, and political problems as they affect the balance of power, disarmament, the East-West struggle, the United Nations and the emerging states of Africa and Asia.

Prerequisite: None

Corequisite: None

POLI690 Political Theory

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history of Western political thought from the Greeks through the 18th century. Theories pertaining to the nature of the state and the legitimate objectives of governments: authority, sovereignty, law, liberty, etc.

Prerequisite: None

Corequisite: None

PORT201 Portuguese 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

PSYC100 Intro to Psychological Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A comprehensive overview of what psychological science has discovered about human behavior and mental processes over the last century. Students will be introduced to many areas of academic and applied psychology as well as persistent themes that characterize the field (e.g., nature vs. nurture). The practical applications of psychological knowledge will be emphasized. Students will gain an understanding and appreciation of the psychological phenomena that occur in their daily lives. In addition, a habit of thinking clearly about the relationship between knowledge claims and evidence will be fostered. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PSYC102 Child Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the major developmental processes that occur in childhood between conception and the onset of adolescence, including both normal and problematic aspects of development. Fulfills psychology general education requirement but recommend non-education majors take PSYC100 to meet the general education requirement.

Prerequisite: None

Corequisite: None

PSYC103 Adolescent Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course examines the processes, products, and effects of changes experienced by adolescents as they develop from late childhood into early adulthood. The major topics will include: foundations, principles, and methods of research; theoretical positions and perspectives; biological processes and physical development; cognitive development and social cognition; information processing and intelligence; family processes and relationships with parents; sibs, peers, friends, and group relationships; schools and culture; the sense of self and identity; sex roles and sexuality; moral development, values and religion; achievement, careers, and work; and the problems and disturbances related to underachievement, drug and alcohol abuse, delinquency, pregnancy and parenthood, loneliness, eating disorders, depression, suicide, and psychopathology. Non-Education majors should take PSYC100 to satisfy their general education requirement. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

PSYC111 Psychology of Early Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth examination of the physical, cognitive, emotional, and social processes and products of development that typically occur from conception through middle childhood, including both normal and problematic aspects of development.

Prerequisite: None

Corequisite: None

PSYC202 Research Methods in Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to psychological methodology and theory through the use of exercises, small experiments, in-class discussion, and lecture. Experimental, quasi-experimental, and non-experimental methodological techniques of social science research are explored.

Prerequisite: (PSYC100) OR (HONR180)

Corequisite: None

PSYC204 Writing for Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course focuses on writing papers for psychology courses or professional journal articles. Students will develop information-seeking strategies, identify types of sources needed, and develop search strategies for locating psychology and related reference material utilizing traditional and electronic resources. Students will learn to summarize material and incorporate it into well written experimental and non-experimental papers that conform to APA style. Emphasis will also be given to basic writing elements, such as grammar, organization, and logical writing.

Prerequisite: (ENGL100 AND PSYC100) OR (ENGL100 AND HONR180) OR (HONR111 AND HONR180) OR (HONR111 AND PSYC100)

Corequisite: None

PSYC205 Applied Psychological Statistics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teaches students how to utilize statistics in specific psychological settings in order to answer important theoretical and practical questions. Examples from inferential (parametric and nonparametric) statistics and correlational statistics will be presented and applied to real research problems. Difficult decisions such as what statistics to use, how to determine necessary sample size, and how to insure both random samples and representative treatments will be discussed.

Prerequisite: (MATH107 AND PSYC202)

Corequisite: None

PSYC212 Forensic Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the field of psychology and the law, also known as Forensic Psychology or Legal Psychology. Students will be introduced to the many ways that psychology influences the legal system.

Prerequisite: (PSYC100)

Corequisite: None

PSYC215 Brain & Behavior

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the relationship between the activity of the brain and an organism's thoughts, experiences, and actions. Provides the necessary background in neuroanatomy, the mechanics of synapses, sensory neurophysiology, and other basic building blocks of the nervous system. Subsequently, the students will be shown the behavioral connection by stressing more applied topics like the biological bases of mental illness, language, sleep, and sexual behavior.

Prerequisite: (PSYC100)

Corequisite: None

PSYC235 Interpersonal & Leadership Skills

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to the fundamental interpersonal skills of empathy, assertion, and negotiation and integrates these skills into the leadership skills of planning, organizing, leading, communicating, controlling, and assessing. Students read articles both on basic communication skills and the skills of leadership such as decision-making, team building, conflict management, and personal influence. They accomplish projects, which assess and develop their skills in each of these areas. Students receive feedback from their peers and the instructor on interpersonal and leadership skills.

Prerequisite: (PSYC***) OR (HONR180)

Corequisite: None

PSYC240 Life Span Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This second level psychology course, a requirement for students in the nursing program, introduces the student to summary overviews of the major physical, intellectual, personality, and social developments unique to each stage of life from conception to death in old age. Patterns and rates of these age-related changes will be examined within a life-span perspective. The salient contributions of physical maturation and health, qualitative cognitive changes, and family and societal influences to the processes of individual development over the normal life span will be analyzed.

Prerequisite: (PSYC100) OR (HONR180)

Corequisite: None

PSYC250 Social Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the study of individual behavior in social situations. Course focuses on human interaction or how individuals affect and are affected by others. Topics such as interpersonal perception, attitudes, prejudice, aggression, altruism, attraction, group behavior, and social exchange are explored and discussed.

Prerequisite: (PSYC100) OR (HONR180)

Corequisite: None

PSYC300 Primatology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides an opportunity for students to study the primate order that consists of some 230 different living species that are divided into 13 families. Old world and new world monkeys are studied as well as prosimians and the greater and lesser apes. Their evolution, taxonomy, morphology, habitats, social organizations, behavior and cognition are described. Endangered species are identified and strategies to promote their survival are discussed.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL101 AND PSYC102) OR (BIOL101 AND SOCI101) OR (ANTH101 AND BIOL101) OR (BIOL106 AND PSYC100) OR (BIOL106 AND PSYC102) OR (BIOL106 AND SOCI101) OR (ANTH101 AND BIOL106)

Corequisite: None

PSYC306 History & Systems of Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Orients the student to the historical antecedents of contemporary psychology. Attention will be given to contemporary trends in the U.S. and other countries.

Prerequisite: (PSYC100) OR (HONR180)

Corequisite: None

PSYC307 Abnormal Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The nature and extent of mental illness and its historical antecedents with special attention to relevant topics in community psychology. Examination of various approaches to mental abnormalities and an introduction to important research areas.

Prerequisite: (HONR180 AND PSYC1**) OR (PSYC1** AND PSYC100) OR (PSYC100 AND PSYC2**) OR (PSYC100 AND PSYC3**) OR (PSYC100 AND PSYC4**) OR (HONR180 AND PSYC2**) OR (HONR180 AND PSYC3**) OR (HONR189 AND PSYC4**)

Corequisite: None

PSYC308 Psychology of Personality

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course provides the student with an in-depth study of the scientific study of personality. The theoretical models and research methods from a variety of points-of-view will be studied.

Prerequisite: (PSYC*** AND PSYC100) OR (HONR180 AND PSYC***)

Corequisite: None

PSYC310 Cognitive Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The data and theories in perception and human information processing will be covered. An emphasis will be placed on attention, memory and visual as well as auditory processing.

Prerequisite: (BIOL101 AND PSYC100 AND PSYC202) OR (BIOL106 AND PSYC100 AND PSYC202) OR (BIOL101 AND HONR180 AND PSYC202) OR (BIOL106 AND HONR180 AND PSYC202)

Corequisite: None

PSYC313 Industrial & Organizational Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive study of the application of the methods, facts, and principles of the science of human behavior to people at work. Students will study the designing of organizations, which effectively integrate new technologies toward profitable and socially satisfactory ends.

Prerequisite: (HONR180) OR (PSYC100)

Corequisite: None

PSYC315 Health Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Health Psychology is a survey course in the psychology of health and wellness. Findings using the bio-psycho-social model of health and disease are discussed. The course covers such topics as the definitions of disease and wellness, pain management, addictions, behavioral aspects of heart disease and cancer, psychoneuroimmunology, personality and wellness, and the psychology of healing.

Prerequisite: (PSYC100 AND PSYC215) OR (PSYC100 AND PSYC410) OR (HLTH251 AND PSYC100) OR (HONR180 AND PSYC215) OR (HONR180 AND PSYC410) OR (HLTH251 AND HONR180) OR (HLTH130 AND PSYC100) OR (HLTH130 AND HONR180)

Corequisite: None

PSYC317 Sec Educ 2 Block: Educ Psycholog

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of knowledge about the learner, the learning process, and instructional planning, execution and assessment methodologies.

Prerequisite: None

Corequisite: None

PSYC322 Drugs & Human Behavior

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides information about the physiological and psychological effects of prescription, over the counter, and illegal drugs. Theories of addiction and methods of rehabilitation will be covered and the government agencies and laws, which regulate the manufacture and distribution of drugs, will also be considered. An emphasis will be placed on the narcotics, alcohol, stimulants, depressants and hallucinogenics.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL106 AND PSYC100) OR (HLTH251 AND PSYC100) OR (BIOL101 AND HONR180) OR (BIOL106 AND HONR180) OR (HLTH251 AND HONR180) OR (HLTH130 AND PSYC100) OR (HLTH130 AND HONR180)

Corequisite: None

PSYC328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in psychology. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

PSYC402 Sensation and Perception

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores sensation and perception as complementary processes that result in interpretations of the physical environment. The course will build upon prior knowledge of the biological basis of behavior and psychological research skills. It will focus on analyzing how information is gathered from the physical senses, converted into neural activity, and processed by the brain to create unique perceptions. Students will critically evaluate relevant theories, developing an advanced understanding of the role of sensation in perception.

Prerequisite: (PSYC100 AND PSYC202 AND PSYC215)

Corequisite: None

PSYC409 Applying Research Methods in Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with a practical experience in conducting psychological research. Students engage in the following activities: literature search, data collection and analysis, and manuscript preparation. Students complete at least one class research project and one small group or individually designed research project. Students write research reports in APA format, as well as create and present a poster of their final project.

Prerequisite: (PSYC202 AND PSYC205)

Corequisite: None

PSYC410 Physiological Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The physiological mechanisms responsible for sensory and motor processing and the control of motivation, learning, memory, and autonomic processes. An emphasis will be placed on the role of the central and peripheral nervous systems as well as the endocrine system in the regulation of these processes. Elementary neuroanatomy will be studied from a functional point of view with the assistance of preserved materials, and a brief introduction to pharmacology will be included.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL106 AND PSYC100) OR (BIOL101 AND HONR180) OR (BIOL106 AND HONR180)

Corequisite: None

PSYC412 Human Neuropsychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the field of Neuropsychology. The instructor will cover basic brain anatomy relevant to higher mental functions and will describe the methods used in Clinical Neuropsychological assessment. The course will cover language dysfunctions affecting speaking, comprehending, reading, and writing. It will also cover descriptions and assessment of computation, movement, and recognition deficits. Neglect, callosal, frontal lobe, amnesic, epileptic, emotional, and dementia syndromes will conclude the topics for the course. Students will learn through reading and discussing case histories of patients who have suffered brain damage. The students will be expected to design treatment and management plans for some of these patients.

Prerequisite: (PSYC215 AND PSYC307) OR (PSYC410)

Corequisite: None

PSYC421 Psychological Assessment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will introduce students to theory and application of assessment for the purposes of clinical diagnosis and treatment planning. Students will be exposed to assessments that are commonly used to evaluate intellectual functioning, interests, and normal and abnormal personality characteristics. This course does not train students to administer psychological assessments.

Prerequisite: (PSYC202 AND PSYC307 AND PSYC308)

Corequisite: None

PSYC425 Psychology of Women

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Examines the psychology of women in the following areas: The status of women from a historical and current perspective; developmental issues; achievement motivation; female sexuality; and psychological disorders prevalent in women.

Prerequisite: (PSYC*** AND PSYC100) OR (HONR180 AND PSYC***)

Corequisite: None

PSYC440 Adult Development and Aging

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on normal human development over the full span of the adult years, examining both stability and change in the physical, intellectual, emotional, and social dimensions of adult life. The major challenges, tasks, hazards, crises, achievements, and satisfactions typically experienced at each stage or era will be explored and discussed.

Prerequisite: (PSYC100) OR (PSYC102) OR (PSYC103) OR (PSYC240) OR (HONR180)

Corequisite: None

PSYC450 Psychotherapies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Psychotherapies will examine several major psychotherapeutic processes, including psychoanalysis, client centered therapy, Gestalt therapy, Existential therapy, behavior modification, and biofeedback as used in psychotherapy. Class meetings will be devoted primarily to the demonstration of psychotherapeutic processes and students will be expected to participate in the demonstrations. This course is

not designed to develop competence as a psychotherapist. The student will develop a sufficient understanding of psychotherapeutic processes to enable him/her to enter into post bachelor's training programs.

Prerequisite: (PSYC307 AND PSYC308)

Corequisite: None

PSYC470 Counseling Skills

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed for advanced psychology majors and other students who are interested in human service careers. The focus is on the development of counseling relationship, specific skills that foster change and growth in others, and ethical considerations in helping.

Prerequisite: (PSYC450)

Corequisite: None

PSYC625 Psychology of Women

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the psychology of women in the following areas: The status of women from a historical and current perspective; developmental issues; achievement motivation; female sexuality; and psychological disorders prevalent in women.

Prerequisite: None

Corequisite: None

PSYC628 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in psychology. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

PSYC640 Adult Development and Aging

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on normal human development over the full span of the adult years, examining both stability and change in the physical, intellectual, emotional, and social dimensions of adult life. The major challenges, tasks, hazards, crises, achievements, and satisfactions typically experienced at each stage or era will be explored and discussed.

Prerequisite: None

Corequisite: None

PYAS300 Introduction to Physician Assistant Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed as an introductory course for students contemplating a career as a physician assistant. The course will expose students to the history and development of the physician assistant profession, the role of the profession in American medicine, and skills required as a pre-requisite to entering the field. Particular emphasis will be placed on the role of physician assistants in caring for the needs of underserved populations. This course may be offered either face-to-face or via distance education.

Prerequisite: None

Corequisite: None

PYAS600 Service Learning Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It prepares the student to participate in program service learning projects that focus on the health care needs of rural communities. Content areas in this module include: introduction to community health and preventive medicine, community health needs assessment, community screening and health promotion/disease prevention programs, diagnostic procedures used in health screening programs, and alternative therapies. Each student will participate in designing, implementing, and assessing community-based service learning projects in designated communities within proximity to the university.

Prerequisite: None

Corequisite: None

PYAS601 Medical Decisions

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An exploration of the many influences in medical decisions made by providers, patients, communities and governments. Institutional and psychological constraints will be considered when looking at legal, ethical, moral and personal medical decisions. Medical decisions will also be viewed through various multicultural prisms. Throughout the course, we will examine the balance of pragmatism and compassion in the quickly changing medical arena.

Prerequisite: None

Corequisite: None

PYAS602 Introductory Module

[Minimum Semester Hours: 5 sh; Maximum Semester Hours: 5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It introduces the student to fundamental concepts essential to understanding subsequent components of the curriculum. Content areas in this module include: fundamentals of medical research and reasoning, an overview of pathophysiology, introductory patient assessment including the medical history and physical examination, pharmacokinetics and pharmacodynamics, health promotion and disease prevention,, medical records, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS603 Gross Human Anatomy

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Gross anatomy is studied regionally stressing relationships of major structures, organs, vessels, and nerves. Human cadaver observation and dissection by students are included in the laboratory sessions. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine are stressed.

Prerequisite: None

Corequisite: None

PYAS604 Women's Health Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in gynecology and women's health. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS606 Urology and Sexually Transmitted Disease Module

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in urology, including sexually transmitted diseases. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, services learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS608 Human Sexuality Module

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. Personal attitudes toward sexual issues are explored in order to prepare the student to discuss issues of sexuality with patients. Other topics include human sexual response, sexual diversity, and the diagnosis and treatment of disorders of human sexual response.

Prerequisite: None

Corequisite: None

PYAS610 Infectious Disease Module

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in infectious diseases. Content areas in this module include: medical research and reasoning, medical microbiology, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education,, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS612 Allergy and Immunology Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in allergy and immunology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS614 Hematology Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in hematology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS615 Underserved Populations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An exploration of factors, especially historical, racial, ethnic, socioeconomic, and geographic, determined to create disparities in healthcare access, delivery, and policy. The course will specifically encompass/consider barriers known to affect these disparities in rural and urban regions as well as various healthcare settings including correctional facilities.

Prerequisite: None

Corequisite: None

PYAS616 Oncology Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in oncology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS618 Endocrinology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in endocrinology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None
Corequisite: None

PYAS620 Cardiology Module

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in cardiology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None
Corequisite: None

PYAS624 Nephrology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in nephrology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None
Corequisite: None

PYAS626 Psychiatry Module

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in psychiatry. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedure, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None
Corequisite: None

PYAS628 Ophthalmology Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in ophthalmology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None
Corequisite: None

PYAS630 Neurology Module

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in neurology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None
Corequisite: None

PYAS632 Orthopedics Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in orthopedics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS634 Rheumatology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in rheumatology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS636 Dermatology Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in dermatology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS638 Gastroenterology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in gastroenterology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS640 Obstetrics Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in obstetrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS644 Pediatrics Module

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in pediatrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient

assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS646 Geriatrics Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in geriatrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS648 Surgery Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in surgery. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS650 Emergency Medicine Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in emergency medicine. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS652 Alternative Medicine Module

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. This module provides the student with an orientation to alternative methods of health care, including such fields as acupuncture, chiropractic, massage, naturopathy, and culturally-based therapies. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS654 Occupational Medicine Module

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in occupational medicine, with special emphasis on those occupations that predominate in rural areas. Content areas in this module include: medical research and reasoning, epidemiology, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, prevention, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

PYAS661 Evidence Based Medicine I

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The first of three complimentary courses that will develop skills in Evidence Based Medicine (EBM). Students will build upon skills acquired during the first year of the program and apply EBM skills to authentic patient cases. Students will explore the limitations and the ethical implications of evidence based practice. The overall goal this course will be to extrapolate (EBM) use into their future practice as clinicians.

Prerequisite: None

Corequisite: None

PYAS662 Evidence Based Medicine II

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The second of three complimentary courses that will develop skills in Evidence Based Medicine (EBM). Students will build upon skills acquired during the first year of the program EBM I. Students will apply EBM skills to authentic patient cases. Students will explore the limitations and the ethical implications of evidence based practice. The overall goal this course will be to extrapolate evidence based medicine use into their future practice as clinicians.

Prerequisite: PYAS661

Corequisite: None

PYAS663 Evidence Based Medicine III

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The third of three complimentary courses that will build upon skills acquired during EBM I and II. Students will further develop skills using the concepts of variability, validity, sensitivity, specificity and probability of testing. Students will apply EBM to their daily clinical practice. This course culminates in the written and oral presentation of the EBM capstone project.

Prerequisite: (PYAS662)

Corequisite: None

PYAS665 Clinical Rotations II

[Minimum Semester Hours: 17 sh; Maximum Semester Hours: 17 sh]

An eighteen-week clinical experience, the second in a series of three courses, that allows students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will be assigned to a minimum of three clinical rotation sites in any of the following disciplines: surgery, internal medicine, pediatrics, OB/GYN, emergency medicine, or any subspecialty discipline that will develop skills required for generalist/primary care practice.

Prerequisite: PYAS664

Corequisite: None

PYAS666 Clinical Rotations III

[Minimum Semester Hours: 17 sh; Maximum Semester Hours: 17 sh]

An eighteen-week clinical experience, the third in a series of three courses, that allows students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will develop an understanding of the health promotion, disease prevention needs of communities and refine skills that develop problem-focused and disease-oriented approach diseases commonly seen in the primary care setting.

Prerequisite: PYAS665

Corequisite: None

PYAS670 Clinical Rotation: Corrections Medicine

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This rotation is one of a series of rotations required by students enrolled in the LHUP Physician Assistant Program Corrections Concentration. The course will expose the student to medical and ethical issues inherent to providing healthcare services in correctional settings. During the six-week correction medicine rotation, the PA student will develop appreciation for the care of the incarcerated patient with particular emphasis being placed on the uniqueness of such care in the corrections setting.

Prerequisite: None

Corequisite: None

PYAS671 Clinical Rotation: Obstetrics and Gynecology

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

During this six-week clinical rotation, the student is assigned to a preceptor who practices obstetrics and gynecology/maternal and child health. The student will develop the knowledge, skills, abilities and attitudes required to care for obstetric and gynecologic patients in the office and hospital settings. Students will develop both a problem-oriented and disease-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of common obstetric and gynecologic problems seen in primary care.

Prerequisite: None

Corequisite: None

PYAS672 Clinical Rotation: General Surgery

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This six-week clinical rotation is one of a series of five designed to develop a core base of medical knowledge for the Physician Assistant in Rural Primary Care student. Students will be assigned to a physician preceptor, who will act as both mentor and teacher, developing the surgical acumen required in primary care practice. Students will be required to develop a problem and disease oriented approach to the etiology, pathophysiology, manifestations, diagnosis and treatment of surgical disease commonly seen in the primary care setting.

Prerequisite: None

Corequisite: None

PYAS673 Clinical Rotation: Pediatrics

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh]

In this six-week clinical rotation, the student is assigned to a preceptor who practices pediatrics/maternal and child health. The student will develop the knowledge, skills, abilities and attitudes required to care for pediatric patients in office and hospital settings. The student will develop both a problem-oriented and disease-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of common pediatric problems seen in primary care.

Prerequisite: None

Corequisite: None

PYAS674 Clinical Rotation: Internal Medicine

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

In this six-week clinical rotation, the student is assigned to an internist physician preceptor, who will serve both as mentor and clinical instructor. The student will develop the knowledge, skills, abilities and attitudes required to care for the adult and geriatric patient in rural primary care. Students will develop both a problem-oriented and disease-oriented approach to the etiology, pathophysiology, manifestations, diagnosis, and treatment of diseases commonly seen in the primary care setting.

Prerequisite: None

Corequisite: None

PYAS675 Clinical Rotation: Elective

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This course is one in a series of five clinical rotations designed to develop a core base of medical knowledge for the Physician Assistant in Rural Primary Care student. Students will be assigned to a physician preceptor, who will serve as both mentor and teacher, developing the skills required to care for the patient in rural primary care. The elective rotation allows the student to develop skills in a primary care subspecialty outside the four core rotations that are requirements within the curriculum. Areas considered appropriate for elective rotations include, but are not limited to: emergency medicine, Geriatrics, Psychiatry, oncology, Otolaryngology, Orthopaedics, or any other area that is appropriate to rural primary care practice. Students will be required to develop an appreciation of epidemiology, etiology, clinical presentation, and management of diseases that commonly present in primary care that are shared with the primary care subspecialist.

Prerequisite: None

Corequisite: None

PYAS676 Preceptorship in Rural Primary Care

[Minimum Semester Hours: 18 sh; Maximum Semester Hours: 18 sh]

In this eighteen-week clinical preceptorship, the student is assigned to a primary care physician preceptor, who will serve both as mentor and clinical instructor. The student will develop the knowledge, skills, abilities and attitudes required to care for the pediatric, adult and geriatric patient in rural primary care. In addition to developing a problem-oriented and disease-oriented approach to the etiology, pathophysiology, manifestations, diagnosis, and treatment of diseases commonly seen in the primary care setting, the student will also develop an understanding of the health promotion, disease prevention needs of the community in which they are located.

Prerequisite: None

Corequisite: None

PYAS690 Summative Remediation Module

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This module represents a customized unit of study that will assist the student in meeting the requirements set forth in the Physician Assistant Program Summative Evaluation Process. The LHUP PA Program summative evaluation is designed to evaluate student's mastery of areas including cognitive, psychomotor and affective skills required for entry level clinical practice as a physician assistant. Enrollment is limited to students who, at the completion of the 24-month Physician Assistant Curriculum, have not met the standards set forth in summative evaluation or who desire to enhance their preparation for National Board Certification.

Prerequisite: None

Corequisite: None

READ203 Psychology of Reading

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the psychological basis of reading offers the student a better opportunity to extend the definition and understanding of reading as cognitive and affective processes. The student will demonstrate a basic knowledge of physiological and psychological bases for reading. Genetic development and the neurophysiology of conceptualization as the basis for self-direction, and the neurological factors relating to reading development, cognitive styles, sensory discrimination, sensory integration systems, language and thought patterns will be examined.

Prerequisite: (PSYC102) OR (PSYC103)

Corequisite: None

READ204 Primary Reading

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasis will be placed upon the psychological, linguistic, and physical development of children and their language, and the relationship of reading to that development. Topics such as phonics, linguistics, basic sight and personal sight vocabularies, readability, and informal assessment of reading performance will be studied in detail through the use of appropriate modules.

Prerequisite: (PSYC102) OR (PSYC103) OR (PSYC111)

Corequisite: None

READ210 Literacy Corps: Practicum in Adult Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course will provide an understanding of the problem of adult illiteracy in the United States. Students will study adult literacy curricula and tutoring models that have been used effectively by adult basic education and literacy programs. Students will develop and implement tutoring plans with adult basic education students as part of a supervised practicum in the CIU Development Center for Adults or at other sites approved by the coordinator. Students will be required to keep detailed electronic journals of tutorial sessions and, upon completion of the course, will prepare and present clinical reports.

Prerequisite: None

Corequisite: None

READ300 Intermediate Level Reading

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasis will be placed on how to meet the needs of intermediate level readers, grades 3 through 6. A distinction is made between learning to read, which typically occurs in the primary grades, and reading to learn and enjoy, which occurs thereafter. Building upon competencies developed in READ204, the prerequisite course in which learning to read is explored, students in the Intermediate Reading course will examine methods used to support reading to learn and enjoy by developing a comprehensive understanding of methods for scaffolding the development of metacognitive strategies that support reading comprehension across the curriculum. Students will examine the research that underlies a strategic reading program; discover how to organize the classroom for effective scheduling, student grouping, behavior management, and optimal reading structure; learn effective assessment techniques; discover methods and resources for matching readers and books; and develop an understanding of methods used to address the specific needs of struggling intermediate level readers.

Prerequisite: EDUC202 AND EDUC204 AND READ204

Corequisite: None

READ323 Diagnostic & Remedial Reading

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The major emphasis in this course will be upon the diagnosis of reading disabilities among school children of all ages. Since both individual and institutional factors may be involved in the failure of a child to reach his potential in reading, behavior from both factors as it is related to reading development will be studied. Reading disabilities to be studied range from the problems of non-reader to reluctant reader.

Prerequisite: READ204

Corequisite: None

READ410 Contemporary Issues in Reading Education & Literacy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Helps students synthesize into a unified whole a concept of literacy and reading in the school and society. Additionally, efforts will be made to have students understand the international emphasis on the place in the world of English as the universal language. Students will undertake the study of new developments in school reading programs such as literature based reading instruction, whole language instruction and the holistic approaches. Students will also become acquainted with reading programs and methods on the international scene.

Prerequisite: None

Corequisite: None

READ443 Practicum Diagnosis & Remediation of Reading Difficulties

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasizes the remediation of reading difficulties among children of all stages of reading development, based upon a diagnosis through formal testing, subjective observation and informal inventory procedures. A practicum course in which the student will undertake the correction of diagnosed problems and, based upon pre and post evaluations, will assess the results of his efforts at remediating a problem. Each student will prepare a complete report of his diagnostic and remedial procedures which contains an analysis of the results of their application.

Prerequisite: (READ323)

Corequisite: None

RECR105 Leisure, Wellness, and Personal Lifestyle

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the philosophy, principles, and techniques of leisure education. This course addresses leisure in its historical and modern contexts as well as the relationships between leisure, work, health, and wellness at both the individual and societal levels.

Prerequisite: None

Corequisite: None

RECR119 First Year Seminar for Recreation Management Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the culture and mission of the university within the context of an academic discipline of choice. The class will explore the purpose of college education and be provided an opportunity to engage within an academic discipline. Students are introduced to basic learning and study skills within a content area. Through class readings, students engage in active learning. Co-curricular activities and the incorporation of a peer mentor component facilitate connections with fellow students and faculty. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

RECR200 Principles of Personal Training and Aerobic Leadership

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teach students the principles of physical conditioning in aerobic and anaerobic exercise programs. The students will learn personal training techniques, develop aerobic exercise leadership skills, and become aware of certification opportunities. The course emphasizes the application of exercise principles.

Prerequisite: (RECR244)

Corequisite: None

RECR202 Outdoor Recreation Activities

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach student the basic skills and principles of backpacking and orienteering, cross country skiing, canoeing and rock climbing. Emphasis will be placed on learning skills and techniques for safe participation in the wilderness, proper use of equipment, while causing minimal impact and practicing "Leave No Trace" principles to protect the resource. Restricted to Recreation Management majors with a declared outdoor option; others by permission of the instructor.

Prerequisite: None
Corequisite: None

RECR203 Teambuilding and Challenge Course Facilitation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasizes the application of teambuilding through the use of adventure games, initiative problems (problem solving activities) and the newly constructed Lock Haven University high/low challenge course. Designed to teach students the principles of group processing and ropes course facilitation as it relates to the recreation industry. Students will experience a variety of adventure and experiential education activities; safety techniques related to these activities; and begin developing sound group processing and experiential facilitation techniques. This course is the initial step in training challenge course facilitators. Restricted to Recreation Management majors; other by permission of instructor.

Prerequisite: None
Corequisite: None

RECR204 Foundations of Therapeutic Recreation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to focus on a historical perspective of Therapeutic Recreation (TR) as well as critical philosophical and professional issues within the field. Additionally, the course includes a review of the current allied health fields, their role within the treatment approach and their philosophies. It is designed to meet the National Recreation and Park Association's (NRPA) competencies for accreditation. Restricted to Recreation Management/Therapeutic Recreation majors or with permission of instructor.

Prerequisite: None
Corequisite: None

RECR205 Nutrition for Wellness

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Designed to explore basic knowledge of contemporary nutrition practices. While the course emphasizes the relationship of nutrition to overall good health and well being, it specifically targets students' personal eating habits and the consequences of healthy versus poor food choices. Fulfills General Education Requirements.

Prerequisite: None
Corequisite: None

RECR207 Informational Media in Recreation

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This course is an introduction to the use of informational technology in the planning, productions, and presentation of a variety of media materials necessary to promote recreation management. It is primarily hands-on, based on microcomputer technology, with added emphasis on traditional audio-visual presentation and equipment operations.

Prerequisite: None
Corequisite: None

RECR210 Field Participation in Recreation Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore career interests and develop professional skills. Students are placed in an approved agency under the combined supervision of a field professional and a university faculty member. The field experience provides an opportunity for students to apply their academic instruction in a professional setting within their career track.

Prerequisite: (RECR105 AND RECR110 AND RECR244) OR (RECR101 AND RECR110 AND RECR244)
Corequisite: None

RECR215 Travel and Tourism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course examines the importance of tourism as an important factor in local, state, and national prosperity. It investigates the key components that are applicable to successful tourism management. Professional opportunities and the travel industry will be examined. This course also entails the study of tourism impacts, specifically analyzing social, environmental, and economic variables.

Prerequisite: (RECR110)

Corequisite: None

RECR275 Recreation Services for People with Disabilities

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to recreation services for people with disabilities. The course provides an overview of disabling conditions, attitudes toward people with disabilities, appropriate terminology, legislation that impacts disability services, and accessibility issues. Techniques for working with people with disabilities that include adaptation, evaluation procedures, needs assessment and modification will be addressed. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation. Restricted to recreation management majors or by permission of the instructor.

Prerequisite: None

Corequisite: None

RECR290 Special Topics in Recreation Management

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

A thematic topical approach to Recreation Management with an emphasis on experiential education, "learning by doing through direct experiences." Topics might include but are not limited to the following: international investigations of recreation management, external certifications related to the provision of recreation services, one-time offerings of specific recreation management courses, and field-based coursework. Restricted to recreation management major or permission of the instructor.

Prerequisite: None

Corequisite: None

RECR300 Special Event and Convention Center Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explore special event and convention center management. Students will analyze the various components needed to manage special events with emphasis on conference planning. Topics will include stakeholder involvement, seasonality, theme-orientation, volunteerism, sponsorships, finance and budgeting as they relate to special events and convention center management.

Prerequisite: None

Corequisite: None

RECR301 Exercise Prescription

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to enable students to prescribe appropriate exercises based upon the client's tolerance for exercise. Special emphasis will be placed on risk factors, techniques for evaluation, physical conditions and their role in physical activity assessment and prescription.

Prerequisite: None

Corequisite: None

RECR302 Supervision of Strength Training Programs

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In this course, students will learn how to apply strength training principles in the formulation of individual and team sports programs. Students will assist and supervise athletes during all training phases of a sports year (off-season, pre-season, in-season, and post-season).

Prerequisite: (HLTH128 AND HLTH129)

Corequisite: None

RECR303 Sports Nutrition

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The relationship between exercise, athletic performance, and nutritional status will be examined in this course. Emphasis will be placed on dietary requirements necessary for successful sport performance.

Prerequisite: (RECR205) OR (CHEM111) OR (HPED325)

Corequisite: None

RECR304 Finance and Acquisition of Recreation Resources

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to introduce students to the various methods employed to acquire funds/resources for recreation agencies. The focus of the course content will analyze taxing positioning strategies, complimentary assets of private and public recreation agencies, intergovernmental cooperation, sponsorship proposals, and capital funding mechanisms. Also communicates effective grant writing techniques.

Prerequisite: (RECR110)

Corequisite: None

RECR305 Adv Activities & Outdoor Pursuit

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Active participation in adventure-based activities provides the foundation for students to explore the application and benefits of such programs in recreation and school settings.

Prerequisite: None

Corequisite: None

RECR312 Teaching Conditioning Principles for Certification Testing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach students how to work with predominantly performance based populations and to give students supervised practical application of previously studied theory along with the opportunity to take accredited and nationally recognized certification exams. The certification exams consist of the following: (1) NSCA-CSCS, NSCA-CPT, (2) ACSM-Group Exercise Leader, Health/Fitness Instructor, Health/Fitness Director, Exercise Specialist, (3) AFAA-Step Certification, Personal Training/Fitness Counselor Certification, Advanced Personal Training Certification.

Prerequisite: (RECR200)

Corequisite: None

RECR320 Interpreting the Environment

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course will survey the broad field of environmental interpretation as it is applied to various outdoor resource areas. Students will study the various interpretive methods that can be employed to establish a communication link between the visitor and the areas of natural and cultural resources. Students will have hands-on experience in a variety of interpretive situations.

Prerequisite: None

Corequisite: None

RECR325 Camp Counseling & Administration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

For those students especially interested in becoming competent camp counselors. Stress on understanding children in the camp environment, camp programs, activities, campcraft, and woodcraft. Fundamentals of camp administration will provide foundation for those seeking carrier preparation in camping.

Prerequisite: (RECR244)

Corequisite: None

RECR330 Marketing Recreation Services

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore service marketing with the focus being the recreation industry. The course will look at the similarities and differences in marketing products and services as well as the other variables of promotion, price, product, place and providers.

Prerequisite: None

Corequisite: None

RECR340 Commercial Recreation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Exposes students to each of the four components of Commercial Recreation. Students will develop a working knowledge of the concepts of contractual law and government regulations as they impact on the free enterprise system. Students will utilize their basic understanding of financial documents and profit cost accounting techniques to analyze the financial stability of selected recreation businesses.

Prerequisite: None

Corequisite: None

RECR355 Outdoor Recreation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to analyze the present and future significance of outdoor recreation. Topics to be discussed include historical development, the role of agencies, professionalism, human and social values and functions, recreational opportunities and resources, and problems and issues in outdoor recreation.

Prerequisite: None

Corequisite: None

RECR356 Outdoor Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Outdoor Education is designed to provide students with the opportunity to develop skills to facilitate the environment as an extension of the classroom. The course will focus on the development and implementation of outdoor education programs for the public schools, parks, and other supporting agencies. A special emphasis will be placed on developing an awareness of the need to continue to acquire general knowledge of the environment while planning and conducting educational experiences in the outdoors.

Prerequisite: None

Corequisite: None

RECR357 Intramural Supervision

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The student will explore the function of intramural programs within the larger recreational sports programming field. Specifics will be presented on the administration and supervision of sports programs. Students will have the opportunity for hands-on experience with the intramural program of the University.

Prerequisite: None

Corequisite: None

RECR364 Therapeutic Recreation Assessment and Documentation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores the current assessment tools, treatment approaches and documentation utilized within clinical therapeutic recreation services.

Prerequisite: None

Corequisite: None

RECR365 Therapeutic Recreation Methods and Techniques

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth study of the facilitation techniques, modalities, and activities that a Therapeutic Recreation Specialist (TRS) will utilize when working with clients. A variety of settings and client groups will be discussed along with characteristics, contraindications, and protocols for utilizing Therapeutic Recreation (TR) services.

Prerequisite: None

Corequisite: None

RECR405 Health Promotion at Worksite

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address basic issues and problems in planning, implementing, and evaluating health promotion/wellness programs in a variety of work site settings. Emphasis will be placed on providing students with the knowledge and practical skills needed to perform the responsibilities of a work site health promotion professional.

Prerequisite: (RECR210 AND RECR301)

Corequisite: None

RECR410 Seminar in Current Issues in Recreation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of a variety of current issues in the areas of therapeutic recreation, outdoor recreation, exercise and performance, and community/commercial management. Students use a variety of texts, journals, interviews, electronic media, and newspapers to explore the selected topics. Limited to Recreation Management majors enrolled in Recreation Management Professional Semester.

Prerequisite: None

Corequisite: None

RECR415 Organization and Management of Recreation Agencies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation and analysis of management information from a variety of sources. The ultimate goal of this course is to have the student understand the complicated role of the manager in leisure service organizations with regard to three major categories: General Management, Human Resource Management, and Executive Development.

Prerequisite: None

Corequisite: None

RECR420 Recreational Resource Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation of the multiple elements of recreation resource management. Topics will include indoor and outdoor management theories, principles of planning and design, maintenance and risk management, environmental awareness integration, and site protections and renovation. Additional areas may include landscape design and architectural components. Restricted to Recreation Management students who are enrolled in the Professional Semester.

Prerequisite: None

Corequisite: None

RECR425 Professional Field Experience in Recreation

[Minimum Semester Hours: 10 sh; Maximum Semester Hours: 12 sh]

Designed to facilitate the transition from the academic environment to the professional world. The student will interact with professionals in a variety of programs and settings within their respective areas of specialization.

Prerequisite: None

Corequisite: None

RECR430 Assessment, Evaluation and Research for Recreation Services Method and Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An explanation of the processes and methods of research and evaluation in recreation services. The course explores evaluation and research foundations, methods, design, and application. It is intended to serve as a foundation for students who need skills for program evaluation and to conduct research in the field. Restricted to recreation management majors participating in professional semester.

Prerequisite: None

Corequisite: None

RUSS101 Russian 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

RUSS102 Russian 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None

RUSS201 Russian 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

RUSS328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

SCI110 Science, Technology, and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces physical science concepts such as harmonic motion, thermal expansion, electrical generation, energy, radiation, and basic nanotechnology in the context of important historical, scientific and technological advances as well as their impact on society.

Prerequisite: None

Corequisite: None

SCI119 First Year Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to culture and mission of the university within the context of an academic discipline. They explore the purpose of a college education and participate in activities related to their academic field. College learning and study skills are introduced in the context of the content area. Common activities and the incorporation of a peer mentor component facilitate connection with fellow students and faculty.

Prerequisite: None

Corequisite: None

SCI201 Inquiry into Physical Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a more adequate content background for teaching science in the elementary school. Emphasis is on individual student activity involving the handling of everyday equipment and supplies. Units cut across various fields of science including physics, chemistry, meteorology, and life science including fieldwork. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

SCI209 Secondary Science Methods 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first course in a two-course science teaching and learning methods sequence for prospective teachers in all science disciplines. Includes field experiences and practice teaching and is organized around the following topics: nature of science, science learning, scientific inquiry, history of science education, national and state science standards, diverse learners, direct instruction, demonstrations, constructivism, classroom safety and the ethical treatment of animals, and professionalism.

Prerequisite: (PSYC103 AND SPEC204)

Corequisite: None

SCI315 Secondary Science Methods 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

The second course in a two-course science teaching and learning methods sequence for prospective science teachers. Includes numerous field experience, practice teaching and is organized around the problems of practice, with an emphasis on teaching science as inquiry, instructional strategies, curriculum planning, assessment, inquiry-empowering technologies, reading and writing across the curriculum, teaching students with special needs, and professionalism. Experiences with various methods and tools as learners will include content from physics including Electricity and Magnetism.

Prerequisite: None
Corequisite: None

SCI328 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None
Corequisite: None

SCI415 Student Teaching and Practicum Secondary 1: Science

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None
Corequisite: None

SCI416 Student Teaching and Practicum Secondary 2: Science

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None
Corequisite: None

SCI494 Student Teaching and Practicum 2: Secondary Education Science

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None
Corequisite: None

SCI601 Natural Selection and Evolution

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides content background which elementary and middle school teachers need to effectively teach the tenets of Darwinian natural selection and evolution. Other topics, including population genetics, sexual selection and altruism, molecular evolution, human origins, and extinction, will be presented using inquiry-based pedagogy and will stress the processes of science. Although topics such as creationism and intelligent design will be considered briefly, the focus of this offering will be evolution as manifest in biological systems. This course is founded upon both the National Science Education Standards and the Pennsylvania Science and Technology Standards.

Prerequisite: None
Corequisite: None

SCI602 Plant Adaptations and Survival

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Examines a variety of anatomical, morphological, life cycle, and physiological adaptations that contribute to growth, survival, and reproduction of plants. These adaptations allow plants to successfully survive in various environments and are a basis for biodiversity. The course is founded upon the National Science Education Standards, Pennsylvania Science and Technology Standards and the Pennsylvania Ecology and Environmental Standards and provides content knowledge which is pertinent to elementary and middle school classroom instruction.

Prerequisite: None
Corequisite: None

SCI603 Genetic Concepts

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Reviews basic concepts in Mendelian (transmission), molecular, and evolutionary genetics through hands-on activities, projects, and discussions. This course is based on the National Science Education Standards and the Pennsylvania Science and Technology Standards, and provides content knowledge pertinent to elementary and middle school classroom instruction.

Prerequisite: None

Corequisite: None

SCI604 Wetlands Ecology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides content background which elementary and middle school teachers need to effectively teach concepts related to wetland habits, species and ecology. Wetland structure and function will be presented using inquiry-based pedagogy. This course is founded upon both the National Science Education Standards, the Pennsylvania Science and Technology Standards and the Ecology and Environmental Standards and provides content knowledge which is pertinent to elementary and middle school classroom instruction.

Prerequisite: None

Corequisite: None

SCI640 Water Resources

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Provides advanced content background that elementary and middle school teachers need to teach effectively the principles of water resources. This course is founded upon the National Science Education Standards, Pennsylvania Science and Technology Standards, and Pennsylvania Ecology and Environment Standards.

Prerequisite: None

Corequisite: None

SCI660 Simple Machines

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides content background that elementary and middle school teachers need to effectively teach the tenets of simple machines based on the Standards. Topics addressed in this course (levers, wheel and axles, pulleys, inclined planes, screws, and wedges) are presented using inquiry-based pedagogy and stress the processes of science. This course is founded upon the National Science Education Standards and Pennsylvania Science and Technology Standards.

Prerequisite: None

Corequisite: None

SOCI101 Introduction to Sociology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasizes the concepts and methodology by which the sociologist investigates the relationship between groups, institutions, cultures and the individual. Race, gender, class, religion and other forms of difference receive special treatment as mediating variables in this relationship.

Prerequisite: None

Corequisite: None

SOCI203 Social Problems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of a variety of contemporary social problems such as alcoholism, drug abuse, crime, delinquency, mental disorders, poverty, minority discrimination, and family disorganization.

Prerequisite: (SOCI101)

Corequisite: None

SOCI206 Marriage & Family

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An historical and analytical study of the patterns of behavior within courtship, marriage, and the family, with special attention to sociological research relating to problem areas in the family life cycle.

Prerequisite: (SOCI101) OR (ANTH101) OR (ANTH102)

Corequisite: None

SOCI300 Sociology of Deviance

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of behavior that is not normal. Part of the course focuses on the forces from a mainstream society itself that compel deviant behavior. Other parts are on interaction processes between deviant actors and mainstream society, the formation of subcultures and countercultures, and the evolution of social rules and crime. The course emphasizes attention to gender and racial social structures.

Prerequisite: (SOCI101)

Corequisite: None

SOCI301 Juvenile Delinquency

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the nature of juvenile delinquency, theories of causation, methods of treatment, and suggested methods of prevention.

Prerequisite: (SOCI101)

Corequisite: None

SOCI302 Criminology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the nature of criminal behavior, theories of causation, its relation to social institutions, and the systems of prosecution and rehabilitation of the criminal.

Prerequisite: (SOCI101)

Corequisite: None

SOCI328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Social science seminar.

Prerequisite: (SOCI101)

Corequisite: None

SOCI330 Japanese Culture and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The course will use sociological and anthropological perspectives to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan.

Prerequisite: (SOCI101) OR (ANTH101) OR (ANTH102)

Corequisite: None

SOCI351 Urban-Rural Patterns

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Analyzes the process of urbanization upon people individually and collectively. Considers the pervasive impact of the urbanization process upon communities of all sizes, no matter how small or isolated. Consideration will be given to some topics most often described as major urban problems: poverty, poor or inadequate housing, crime and violence, and urban finances. A review what has been done to combat each problem and focus on the hypothesis that these problems are a consequence of the way in which we view the world and do business.

Prerequisite: (SOCI101)

Corequisite: None

SOCI352 Sociological Theory

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the evolution of social thought leading to the systematic and scientific basis of modern sociology and systematic analysis of major schools of modern sociological theory.

Prerequisite: (SOCI101)

Corequisite: None

SOCI354 Social Change

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An inquiry into the nature of social change--its causes, processes, and consequences--and a critical examination of theories of social change and their applications to the comparative analysis of Western and Asian societies.

Prerequisite: (SOCI101)

Corequisite: None

SOCI402 Industrial Sociology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of our highly industrialized and urbanized society with emphasis on the role of industry in influencing our American way of life, individually and collectively, and the nature of social change deriving from that industrialization and its concomitant urbanization.

Prerequisite: (SOCI101) OR (PSYC100) OR (HONR180)

Corequisite: None

SOCI403 Social Gerontology: Sociology of Aging

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A sociological analysis of the problems confronting the aged in modern bureaucratic society. Emphasis is placed on the influence that various structures--groups, associations, and institutions have on the changing statuses and roles of individuals in society.

Prerequisite: (SOCI101)

Corequisite: None

SOCI404 Sociological Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of basic research design and statistical inference, and the application of basic statistical techniques as utilized on sociological research.

Prerequisite: (MATH107 AND SOCI101 AND SOCI352)

Corequisite: None

SOCI410 Sociology of Organizations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of informal and formal organizations in the contexts of work, voluntary agencies, and the military. This course investigates the creation, evolving structures, and evolving functions of such organizations and their consequences on race, social class, and gender.

Prerequisite: (SOCI101)

Corequisite: None

SOCI420 Corrections

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will explore the relationship of criminology to criminal justice from systems and interdisciplinary approaches. Major emphases are placed on investigating philosophies and issues in corrections such as retribution, restitution, general and specific deterrence, incapacitation, rehabilitation, or treatment. Correctional strategies are also examined by evaluating traditional and nontraditional adult and juvenile corrections.

Prerequisite: (SOCI101)

Corequisite: None

SOCI430 Capstone Seminar in the Administration of Criminal Justice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This seminar is designed to provide a comprehensive overview of sociology in relation to criminology and criminal justice systems. Major emphases include integrating sociological theory, research and the application of findings to understanding the inter-relatedness of police, courts and correctional systems, as well as policy decisions and their impacts. Efforts are made to synthesize contemporary and past dimensions of criminal justice systems with sociology providing the foundation of interdisciplinary perspectives useful in evaluating various strategies and programs within each system.

Prerequisite: None

Corequisite: None

SOCI602 Industrial Sociology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of our highly industrialized and urbanized society, with emphasis upon the role of industry in influencing our American way of life, individually and collectively, and the nature of social change deriving from that industrialization and its concomitant urbanization. Additional course work is required for graduate level.

Prerequisite: None

Corequisite: None

SOCI604 Sociological Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of basic research design and statistical inference, and the application of basic statistical techniques as utilized on sociological research.

Prerequisite: None

Corequisite: None

SOCI628 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Graduate social science seminar.

Prerequisite: None

Corequisite: None

SOCI654 Social Change

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An inquiry into the nature of social change--its causes, processes, and consequences--and a critical examination of theories of social change and their applications to the comparative analysis of Western and Asian societies.

Prerequisite: None

Corequisite: None

SOCW102 Introduction to Social Work

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to social work values, ethics, knowledge, functions, and roles necessary for practice by generalist practitioners. Provides a foundation in the historical roots and theoretical underpinnings of the social work profession. The social welfare system and social environment in which individuals, families, groups, organizations, neighborhoods, and communities participate are studied from a systems perspective. Special emphasis on empowering marginalized and oppressed populations.

Prerequisite: None

Corequisite: None

SOCW110 Diverse Populations and Groups

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to diverse populations and groups and provides information about differences based on age, disability, social class, culture, color, race, political ideology, gender, ethnicity, religion, sexual orientation, and immigration status. Helps students develop tools for increased understanding of and sensitivity to human diversity and cultures different from their own. The interrelationship among social, economic, and political institutions will be explored.

Prerequisite: None

Corequisite: None

SOCW201 Human Behavior in the Social Environment 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the normal processes of sequential physical, emotional, socio-cultural and spiritual development from conception through young adulthood. Emphasizes common stresses and crises effecting normal development and relates these to social work practice. It utilizes a social systems framework and strengths perspective in applying knowledge of different human contexts to better understand the basis of concerns related to living in our society.

Prerequisite: (SOCW102) OR (SOCW110)

Corequisite: None

SOCW203 Human Behavior & Social Environment 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the normal processes of sequential physical, emotional, and socio-cultural development from middle adulthood through old age. Emphasizes common stresses and crises affecting normal development and maturity and relates these to social work practice. Utilizes a social systems framework to focus on why humans behave the way they do in the context of living in our society.

Prerequisite: None

Corequisite: None

SOCW301 Social Work Practice 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

First of three practice sequence courses, is designed to introduce knowledge, values and skills for generalist micro practice. Emphasizes self-knowledge, use of self as a change agent, understanding social work values, oppression and strategies for combating it, and developing skills for problem-solving, good interpersonal interviewing, and beginning-level research. Students will understand the interdependence of policy, research and practice, and the need to empower clients and themselves to advocate for social and economics justice.

Prerequisite: (SOCW102 AND SOCW201)

Corequisite: None

SOCW302 Social Work Practice 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The second in a sequence of three required social work practice courses, this course will utilize a variety of active learning techniques to help students: integrate social work values and ethics with practice; build critical understanding for effective practice; practice generalist social work, and work with families and groups in social work practice.

Prerequisite: (SOCW301)

Corequisite: None

SOCW310 Social Policy and Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course involves an exploration of the development of social welfare programs. It includes content about the history of social work, the history and current structure of social welfare services and the role of policy in service delivery, social work practice, and the attainment of individual and social well being. Students will understand and demonstrate social policy skills in regard to economic, political, and organizational system.

Prerequisite: (SOCW204 AND SOCW404)

Corequisite: None

SOCW328 Social Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

SOCW401 Field Instruction & Professional Seminar 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Students are placed in a community agency under the supervision of an experienced social worker and a social work faculty member. Students are expected to develop an in-depth understanding of agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level generalist social workers. Attendance at weekly seminars is required. The integration/generalization of conceptual content and problem specific knowledge in the field practice experience is a cycle of inquiry from specific practice experiences to concept/theory and back again in a series of cycles.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412)

Corequisite: None

SOCW402 Field Instruction & Professional Seminar 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Students are placed in a community agency under the supervision of an experienced social worker and a social work faculty member. Students are expected to develop an in-depth understanding of agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level generalist social workers. Attendance at weekly seminars is required. The integration/generalization of conceptual content and problem specific knowledge in the field practice experience is a cycle of inquiry from specific practice experiences to concept/theory and back again in a series of cycles.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412)

Corequisite: None

SOCW403 Social Gerontology: Sociology of Aging

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a knowledge base for understanding the problems the aged face when growing old in a modern bureaucratic society. Emphasis is placed on the influence various structures--groups, associations, and institutions--have on the changing status's and roles of individuals in society.

Prerequisite: None

Corequisite: None

SOCW404 Rural Social Work

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to further develop and fine tune generalist social work skills at all levels of intervention (including individuals, families, organizations and communities). Course content will focus on rural practice and the types of situations that students will encounter in micro practice, understanding and working with families, and working in and with organizations and communities. Advocacy, striving for social and economic justice, and macro level change will be stressed.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW301 AND SOCW302 AND SOCW412)

Corequisite: None

SOCW411 Social Work with Diverse Populations & Groups

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Utilizing a problem-solving approach within an ecological systems framework, this course examines social service delivery with selected client populations and focuses on some of the newer intervention strategies that are available through a variety of agency settings and social service programs. Case Management in social work practice will be a focal concern.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW301)

Corequisite: None

SOCW412 Applied Social Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Provides a basic overview of research methodologies used in social work. It examines quantitative and qualitative research methodologies; research questions; theoretical bases; collection and analyses of data, evaluation of data; findings of research reports; and systematic evaluation of practice. Knowledge of research is applied through participation in a developing and conducting a research project.

Prerequisite: (MATH107 AND SOCW301 AND SOCW302)

Corequisite: None

SOCW415 Child Welfare Services

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore contemporary child welfare issues utilizing the systems and ecological perspectives, integrated with a problem-solving approach. Allows students to understand major concepts and issues related to children and their families at the micro, mezzo, and macro levels of service delivery and establishes a skill-base for promoting change and addressing oppression of children and families.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW301)

Corequisite: None

SOCW420 Field Placement Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The senior seminar, which accompanies field instruction, is designed to serve as a capstone course, and an integrating methods seminar.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412)

Corequisite: None

SOCW425 Social Policy and Services

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores the development of social welfare systems, policies, and programs in historical, societal and organizational contexts. The role of social policy in helping or deterring individuals in attaining their fullest potentials and the effects on social work practice are examined. Emphasizes the analysis of political and organizational processes that influence policy; the policy formulation process; and the relationship between policies and social work goals and purposes.

Prerequisite: SOCW301 AND SOCW302 AND SOCW412

Corequisite: None

SOCW613 Women in Crisis

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores women's changing roles, and crises due to these changes, and their implications for Social Work and human service practitioners. Emphasizing the social worker's responsibilities for advocacy and the responsibilities of a change agent, this course focuses on the social worker's accelerated roles and tasks associated with the situation.

Prerequisite: None

Corequisite: None

SPAN101 Spanish 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to Spanish speech sounds, their discrimination, production and transcription, the vocabulary in context and basic speech patterns, and development of essential grammatical concepts. Conversation and readings.

Prerequisite: None

Corequisite: None

SPAN102 Spanish 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to Spanish speech sounds, their discrimination, production and transcription, the vocabulary in context and basic speech patterns, and development of essential grammatical concepts. Conversation and readings.

Prerequisite: None

Corequisite: None

SPAN201 Spanish 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of fundamental facts and skills, followed by progressively more extensive and complex exercises in listening, speaking, and reading. Emphasis the second semester is on the retention and application of Spanish idiom in written composition from paragraph to theme. Prepares the student for mature reading and discussion in Spanish and for the pursuit of advanced courses.

Prerequisite: None

Corequisite: None

SPAN202 Spanish 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of fundamental facts and skills, followed by progressively more extensive and complex exercises in listening, speaking, and reading. Emphasis the second semester is on the retention and application of Spanish idiom in written composition from paragraph to theme. Prepares the student for mature reading and discussion in Spanish and for the pursuit of advanced courses.

Prerequisite: None

Corequisite: None

SPAN203 Culture of Spain

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Covers the evolution of Spanish culture in all of its diverse facets. Readings, recordings, videos and material from the internet are used to analyze Spain and her people in the past and present. Written and oral reports, lectures and discussions in Spanish.

Prerequisite: None

Corequisite: None

SPAN204 Latin American Culture

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is designed to give the student an introduction to Latin America. The material treated includes Latin American politics, history, race, languages, customs, geography, great men and women, economy, arts, music, and psychology. Of necessity, depth is sacrificed for breadth.

Prerequisite: None

Corequisite: None

SPAN205 Beginning Spanish Composition & Conversation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to improve and develop written and oral expression in Spanish. Some attention will be paid to correctional phonetics. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

SPAN215 Presentations from Hispanic Theatre

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The presentation of one-act contemporary Hispanic plays or of scenes from longer works of dramatic literature. Pronunciation exercises, play analysis, written exercises, and an introduction to basic techniques for the presentation of dramatic material will all serve to enable the student to deliver assigned lines in a natural and convincing manner.

Prerequisite: None

Corequisite: None

SPAN307 Intro Spanish Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the different literary genres as represented by selected works of outstanding Spanish authors. Introduces the student to the basic techniques of literary analysis and to the principal themes and unique characteristics of the literature produced in Spain. Motivates and prepares students for more specialized independent reading and investigation.

Prerequisite: None

Corequisite: None

SPAN308 Intro Spanish American Literatur

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Selected readings in prose fiction, drama, and poetry from all periods. Emphasis is placed on the fundamentals of literary theory as reflected in the works read. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

SPAN312 Advanced Spanish

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intensive study of Spanish, providing review of basic grammar as well as examining more advanced topics not treated in Spanish I-IV. Emphasis on problem areas of the language through a variety of exercises and applications of grammar principles.

Prerequisite: None

Corequisite: None

SPAN313 Intermediate Spanish Composition and Conversation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to develop in the student a facility in the use and comprehension of oral Spanish, as well as in reading and written expression. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

SPAN314 Spanish Phonetics & Linguistics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to general linguistic concepts. Comparison of Spanish and English speech production and language patterns. Application of linguistics to the teaching of Spanish.

Prerequisite: None

Corequisite: None

SPAN318 Spanish Drama 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A study of the major works of the Spanish theater from the second half of the 19th century until the present time. Trends in the evolution of modern drama will be identified and analyzed and the nature of a dramatic work in performance will be considered.

Prerequisite: None

Corequisite: None

SPAN320 Contemporary Spanish Women's Fiction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the Spanish narrative written by outstanding female authors from the Spanish Civil War to the present. The novels and short stories to be studied in class are examples of a new female identity and subjectivity and of women's struggle for individuality.

Prerequisite: None

Corequisite: None

SPAN322 Spanish American Regionalist Novel & the Short Story

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of literary concepts to selected readings in the novel and short story "of the land" from the 19th and early 20th centuries. Typical works treat the native and the common man. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

SPAN323 Spanish American Contemporary Novel and the Short Story

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of literary concepts to selected readings of the Spanish American novel and short story of the contemporary period including such authors as Borges, Carpentier, Fuentes, Garcia Marquez. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

SPAN618 Spanish Drama 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the major works of the Spanish theater from the second half of the 19th century until the present time. Trends in the evolution of modern drama will be identified and analyzed and the nature of a dramatic work in performance will be considered.

Prerequisite: None

Corequisite: None

SPEC101 Multicultural Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will examine diversity among people. By exploring contributors of diversity such as religion, gender, sexual preferences, socioeconomic class, race, ethnicity, and disabilities, students will gain an understanding of the need for a multicultural approach to education. Several different multicultural education approaches will be explored with emphasis on implications to special education programs. This course sets the tone of the "people first" philosophy as used in SPEC 105.

Prerequisite: None

Corequisite: None

SPEC105 Foundations of Special Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses the definitions, characteristics, etiologies, educational and transitional needs of, interventions and strategies for diverse learners and individuals with exceptional learning needs (ELN) through a life span approach.

Prerequisite: None

Corequisite: None

SPEC119 First Year Seminar for Special Education Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements. Must be taken by all Special Education majors either fall or spring semester.

Prerequisite: None

Corequisite: None

SPEC202 Cultural and Linguistic Diversity in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to multicultural and global education as a concept. Students will examine personal awareness and attitudes, cultural knowledge, instructional strategies, and curricular resources impacting PreK-12. Consideration will be given to the instructional needs of English Language Learners (ELL) and effective teaching/learning theories, approaches, research results, and public policies that pertain to diverse learners.

Prerequisite: None

Corequisite: None

SPEC204 Cognitive Development of Diverse Learners

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Designed to address the definitions, characteristics, and educational, social, and emotional needs of diverse learners. Emphasis will be given to the legal rights and responsibilities inherent in the field of special education. Assessment procedures for eligibility, program design and performance monitoring will also be addressed.

Prerequisite: (PSYC102) OR (PSYC103) OR (PSYC111)

Corequisite: None

SPEC212 Low Incidence Disabilities Support

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the conceptual base, educational programming and curricular options for persons with moderate to severe disabilities. The relationship of sensori-motor development between classroom environments and adaptations will be examined in depth. Attention will be given to assessment, determination of goals, person-centered planning and the family-system approach.

Prerequisite: (SPEC105)

Corequisite: None

SPEC215 High Incidence Disabilities Support

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive examination of individuals with mild disabilities (high incidence) and the accommodations/adaptations necessary for their success. Specifically addresses parameters of mild disabilities, theories of learning, learning styles, educational accommodations, instructional strategies, organizations that serve this population.

Prerequisite: (SPEC105)

Corequisite: None

SPEC300 Communication Disorders and Assistive Technology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reviews communication needs for individuals with disabilities. Language development, assistive technology and alternative communication systems will be explored. The scope of this course is intended to enable students to become familiar with assessment and intervention strategies for students with communication disorders.

Prerequisite: SPEC105 SPEC204

Corequisite: None

SPEC310 Manual Communication & Signing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An elective designed to study the basic sign language vocabulary, finger spelling techniques, and non-manual markers used in manual communication. Emphasis is placed on developing proper receptive and expressive skills required for an effective communicative process to occur. Topics to be discussed are a brief history of sign language, cultural principles, sign and manual alphabet formation, proper positioning, and sign systems. Provides opportunities for practical experiences and practice of dialogue and technique.

Prerequisite: None

Corequisite: None

SPEC325 Infant/Preschool Special Needs

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Deals with the development and education of young exceptional children, with an emphasis on ages birth through five years. Focuses on issues of etiology, consequences of developmental delay, early identification, assessment and educational programming designed to promote optimum growth of cognitive language, psychomotor, psychosocial, and self-help skills in young children with special needs. Building effective family-centered intervention programs will be modeled, while utilizing a transdisciplinary approach. The course seeks to correlate developmental concepts and behavioral strategies, while stressing the likeness of exceptional and non-exceptional child development. It will emphasize an inclusionary model and provide practical experiences in inclusive settings. The consultative role of the early intervention teacher will be examined, while providing practical experiences in developing IFSPs and IEPs.

Prerequisite: PSYC102

Corequisite: None

SPEC330 Physical Education & Recreation for the Disabled

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides acquaintance with various activities that can be used with persons with disabilities and without disabilities in outdoor, indoor and aquatic environments. Theory is combined with actual practice. All content evolves around the goal of including persons with disabilities with the non-disabled in regular physical education, recreation and leisure settings, acknowledging choice and variety.

Prerequisite: (SPEC105)

Corequisite: None

SPEC338 Positive Behavior Supports

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the etiology, assessment practices, and intervention strategies espoused by various theoretical perspectives for individuals with mild, moderate, and severe emotional behavior disorders. Emphasis will be on the use of functional behavior assessment and various positive behavior support strategies that can be used in classrooms or related educational facilities.

Prerequisite: SPEC105 SPEC204

Corequisite: None

SPEC340 Gifted

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An elective designed to teach various strategies a teacher can use to meet the academic and social needs of the gifted and talented in the regular classroom setting. Provides opportunity to work with gifted and talented students as well as discussing the theoretical and practical problems of teaching them.

Prerequisite: SPEC105

Corequisite: None

SPEC345 Literacy Instruction for Students with Disabilities

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Addresses the needs of pre-service teachers who have the responsibility for literacy development and instruction for students with disabilities. Emphasis will be given to literacy components, evidence-based practices, and varying challenges students with disabilities have in learning to read and write.

Prerequisite: SPEC204 SPEC105

Corequisite: None

SPEC407 Student Teaching & Practicum Mentally/Physically Disabled 1

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

SPEC408 Student Teaching & Practicum Mentally/Physically Disabled 2

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

SPEC420 Assessing Educational Needs: Special Education Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to educational assessment. Emphasis is on knowledge of test content and purpose to enable selection of appropriate instruments for identification and assessment of students with learning difficulties. Basic elements of test design and usage are presented. Students survey various commercially available instruments and administer selected tests. Students will also conduct and use a portfolio assessment to develop an IEP for a child during the participation experience. This offering is designed to enable all education majors to meet required competencies for instructing students with disabilities in the least restrictive environment.

Prerequisite: None

Corequisite: None

SPEC423 Curriculum Methods for Preschool through Elementary: Special Education Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course offers a broad spectrum of instructional methodologies that are appropriate across various academic and life skill curriculums for preschool and elementary exceptional learners. Students will write and implement lesson plans, teach units of study, develop and apply adaptations and accommodations, and demonstrate instructional practices that can be used in various content areas.

Prerequisite: None

Corequisite: None

SPEC424 Materials and Resources: Special Education Professional Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to provide opportunities to explore and evaluate commercial curriculum materials and software for use in special educational settings. Additionally, students will create appropriate needs-based instructional materials and generate necessary adaptations to existing curriculum in a variety of settings. Students will gain extensive practice in creating quality teaching materials.

Prerequisite: None

Corequisite: None

SPEC425 Law and Collaborative Practices

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Elaborates on the major laws and the changing roles of special educators and support staff to serve all students, including those with exceptional learning needs (ELN). Topics addressed include laws, ethics, working with families, paraprofessionals, inclusive settings, co-teaching, collaboration/consultation models, team planning, and conferencing skills.

Prerequisite: None

Corequisite: None

SPEC426 Establishing and Maintaining Learning Environments in Spec Ed Special Educ Prof Semester

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to provide strategies for organizing, planning, and delivery of instruction in special education settings. Applications for organizing a classroom will be developed to include environments for individuals with mild, moderate and severe disabilities and various levels of support.

Prerequisite: None
Corequisite: None

SPEC430 Assessing Educational Needs and Planning for Instruction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to educational assessment and instructional planning. This course emphasizes the administration and interpretation of formal and informal individual assessments used in identifying needs of students with disabilities. Students will gain experience in administering assessment instruments and writing evaluation reports and individualized educational programs.

Prerequisite: None
Corequisite: None

SPEC440 Strategies for Teaching Students with Low Incidence Disabilities

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Offers a broad spectrum of instructional methodologies appropriate across all levels of academic and life skill individualized independence curriculums for individuals with exceptional learning needs (ELN). Students will develop and implement lesson plans across content areas, strategies that promote positive behavior and social skills, and appropriate adaptations and accommodations.

Prerequisite: None
Corequisite: None

SPEC441 Strategies for Teaching Students with High Incidence Disabilities

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to offer a broad spectrum of instructional methodologies appropriate across all levels of academic individualized general curricula for individuals with exceptional learning needs (ELN). Students will develop and implement lesson plans across content areas, strategies that promote positive behavior and social skills, and appropriate adaptations and accommodations.

Prerequisite: None
Corequisite: None

SPEC450 Community Service Field Experience

[Minimum Semester Hours: 12 sh; Maximum Semester Hours: 12 sh]

An internship where students are placed in a community organization/agency that services individuals with disabilities and will be under the supervision of an experienced professional who is employed by the agency and a special education faculty member. Students are expected to develop an in-depth understanding of the agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level professionals.

Prerequisite: None
Corequisite: None

SPEC493 Student Teaching & Practicum Mentally/Physically Disabled 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Student teaching provides the capstone experience for pre-service teachers. Experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day.

Prerequisite: None
Corequisite: None

SSED119 First Year Seminar for Social Studies Education Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the underpinnings of social studies education at the secondary level for future social studies teachers. The course guides students through their Stage I Teacher Education requirements and early field experience tasks and addresses topics taught in generic freshman seminars. Must be taken by all Citizenship Education majors

Prerequisite: None
Corequisite: None

SSED210 Secondary Education 1: Social Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An integrated approach to teacher preparation in social studies in a middle school and high school setting. Emphasis is on methods, materials, and strategies for teaching social studies subjects required for certification in Social Studies Education by the Pennsylvania Department of Education. The course is the first of a two part sequence of courses and is followed by Secondary Education II: Social Studies. Restricted to students majoring in Secondary Education Social Studies with the required current 3.0 overall and 3.0 in-major GPA requirements.

Prerequisite: PSYC103 AND SPEC204

Corequisite: None

SSED316 Secondary Education 2: Social Studies

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Course description is missing.

Prerequisite: None

Corequisite: None

SSED415 Student Teaching and Practicum Secondary 1: Social Studies

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

SSED416 Student Teaching and Practicum Secondary 2: Social Studies

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

SSED493 Student Teaching and Professional Practicum 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh]

A capstone experience, or of two student teaching experiences required for certification in secondary social studies. Students are placed in a social studies classroom and teach under the supervision of a certified social studies teacher for one half semester. University professors conduct regular practicum sessions, according to prescribed guidelines, and supervise the student teachers. To register, a student must meet Pennsylvania State Teacher Education Guidelines, have a 3.0 GPA overall and in major with no course less than a "C" in professional courses, and have successfully completed required early field experiences. A student must show scores or the admittance ticket (showing evidence that the test date is before the first day of student teaching) of the required Praxis II exam for their major before starting student teaching.

Prerequisite: None

Corequisite: None

SSED494 Student Teaching and Professional Practicum 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

A capstone experience, or of two student teaching experiences required for certification in secondary social studies. Students are placed in a social studies classroom and teach under the supervision of a certified social studies teacher for one half semester. University professors conduct regular practicum sessions, according to prescribed guidelines, and supervise the student teachers. To register, a student must meet Pennsylvania State Teacher Education Guidelines, have a 3.0 GPA overall and in major with no course less than a "C" in professional courses, and have successfully completed required early field experiences. A student must show scores or the admittance ticket (showing evidence that the test date is before the first day of student teaching) of the required Praxis II exam for their major before starting student teaching.

Prerequisite: None

Corequisite: None

SURG100 Introduction to Surgical Technology

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduce the student to the broad field of surgical technology by addressing introductory topics and concepts related to patient care in the surgical setting.

Prerequisite: None

Corequisite: None

SURG110 Surgical Asepsis

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to provide an overview of the concepts and principles of microbiology as related to surgical practice, including a study of microscopic life forms, microbes and disease, and immunology. This course provides the concepts, principles, techniques, and applications related to disinfection, sterilization, and antisepsis as they apply to the operating room.

Prerequisite: None

Corequisite: None

SURG115 Principles and Practices of Surgical Technology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce knowledge, skills, and techniques utilized during the surgical experience, including scrubbing, gowning, and gloving; the establishment of the sterile field with the armamentarium of sutures, instruments, and supplies. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses.

Prerequisite: None

Corequisite: None

SURG116 Surgical Technology Laboratory

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to allow practice and return-demonstration of the principles and procedures related to the knowledge, skills, and techniques utilized during the surgical experience, including scrubbing, gowning, and gloving and the establishment of the sterile field with the armamentarium of sutures, instruments, and supplies in a non-patient contact environment. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses. Restrictions Upon Registration: Restricted to matriculating students in the surgical technology major.

Prerequisite: None

Corequisite: None

SURG120 Surgical Pharmacology

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Identifies the elements, actions, and use of medications and anesthetic agents used during the perioperative experience. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses.

Prerequisite: None

Corequisite: None

SURG200 Professional Issues in Surgical Technology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Explores the area of stress in relation to the individual patient and the Surgical Technologist, discusses the basic concepts related to death and dying, explores the area of ethics in the surgical setting, discusses the concepts of teamwork, leadership, and critical thinking, and guides in preparations to assist Surgical Technologist in their transition from education to the workplace.

Prerequisite: None

Corequisite: None

SURG250 Surgical Procedures 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Explores the diagnostic and surgical interventions of General, Obstetrics/Gynecologic (OB/GYN), Gastrointestinal/Biliary, Otorhinolaryngeal, Ophthalmic, and Genitourinary/Male Reproductive Surgery, while integrating the knowledge, skills, and techniques utilized during the surgical experience on the procedural level. The surgical considerations of special populations (pediatric, geriatric, disabled,

immunocompromised, and trauma patients) will be discussed. Job skills and resume preparation are also addressed. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses.

Prerequisite: (HLTH100 AND HLTH115 AND HLTH120 AND SURG100 AND SURG110 AND SURG115)

Corequisite: None

SURG260 Surgical Procedures 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

Explores the diagnostic and surgical interventions of Thoracic, Cardiovascular, Plastic and Reconstructive and Neurosurgery while integrating the knowledge, skills, and techniques utilized during the surgical experience on the procedural level. It is a

Prerequisite: (SURG120 AND SURG170)

Corequisite: None

SURG270 Operating Room Clinical Externship

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 5 sh]

Implement learned theory, principles, and procedures taught in the classroom via patient contact as a member of the operating room team. This experience takes place in area hospitals and focuses on the performance of the ten defined activities of the surgical technologist - scrub role (STSR) through participation in Level I, II, and III core and specialty surgical procedures. Registration is restricted to matriculating students in the Surgical Technology Program who have a 2.7 GPA or better, and a B or better in HLTH115 and HLTH120. SURG270 (2.0 sh), SURG270 (4.0 sh), and SURG270 (5.0 sh).

Prerequisite: None

Corequisite: None

THEA110 Theatre: An Orientation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to theatre. It includes a definition and analysis of theatrical art, script analysis, the relationship between theatre and the culture from which it came and the roles of theatre practitioners. The course includes hands-on application and group work. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

THEA117 Technical Theatre

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A lecture-lab approach to the art and craft of scenery construction, property construction, scene painting, basic stage lighting, and organization of technical aspects of theatrical production. Suggested for those who wish to learn behind-the-scene aspects of play production. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

THEA134 Acting 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study and practice of the fundamental principles of acting. Stress is placed on the use of the body and voice as the basis of effective acting. This course is for those interested in acting as an art form and as a means of creative expression. At mid-term students will have gained the necessary skill to perform scenes for their classmates. Attendance is key to the successful completion of this course. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

THEA137 Creative Dramatics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Sequenced experiences and exercises in creative drama and improvisation for developing and refining bodily movement, characterizations, and organic reaction. Through structured theatre games and problem solving situations, participants acquire theatrical skills and disciplines without conscious attention. Students will participate in as well as direct creative and dramatic exploration and play making. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

THEA188 Stage Make-Up

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Fundamental training in the principles of stage make-up design and application for the actor as well as the make-up artist. Students will focus on the analysis of dramatic characterization of a role in a play. Students will engage in the design and application of stage make-up to achieve the physical fulfillment of that analysis. Special attention is paid to modern make-up media and methods employed in today's stage, screen and television productions. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

THEA200 Survey of Dramatic Literature

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates and questions, through the analysis of dramatic texts, the relationship of history and representation to identity and culture.

Prerequisite: None

Corequisite: None

THEA222 Children's Theatre

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theory and practice of formal and informal theatre for children through the study of scripts, production, and performance aspects. Emphasis is on the final product and how it comes about with special emphasis placed on how to conceive, produce, direct and promote children's theatre for the classroom, community and the paying public. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

THEA300 Stage Lighting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to stage lighting as an art form. Students will develop skills in script analysis. The student will study techniques of how this analysis is translated into setting the physical and psychological environment of the play. The student will be able to translate this understanding into a practical scheme of lighting instrumentation. Additionally, the course includes: a brief history of stage lighting; a study of lighting instruments, hardware and control systems; use of color; and methods of achieving special effects.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110)

Corequisite: None

THEA315 Intermediate Acting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the principles and techniques of character acting including procedures for analyzing plays, determining the personality of a particular character and relationship to other characters, and developing the means to project the character to an audience. Particular attention is paid to genre, structural analysis and the character's relation to the whole.

Prerequisite: (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA110)

Corequisite: None

THEA328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Humanities seminar.

Prerequisite: None

Corequisite: None

THEA333 Oral Interpretation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theory and techniques of oral interpretation. Class activities include selection, analysis, preparation and presentations of selections from prose fiction, drama and poetry.

Prerequisite: None

Corequisite: None

THEA337 Scene Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to scene design as an art. Through play analysis the student conceives and designs scenery for a variety of theatre environments. Activities include drafting, model building, and architectural research.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110)

Corequisite: None

THEA340 History of the Theatre

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of the theatre as an art form. Special emphasis is placed on the evolution of playwriting as a artistic extension of cultural expression of a given historical period. Other areas of study include the evolution of acting styles, theatre architecture, and staging techniques.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110)

Corequisite: None

THEA366 Stage Costume Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A course designed to give the student fundamental training in the theory and practice of theatrical costume design and construction.

Prerequisite: (THEA150) OR (THEA110)

Corequisite: None

THEA370 Play Production

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A lecture-lab examination of techniques of play production approached from the viewpoints of the actor, the director, and the technical director. Special emphasis on play selection and rehearsal procedures for amateur groups; high schools, community theatre and civic organizations.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110)

Corequisite: None

THEA421 Theatre Workshop 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Participation in a full-length, theatrical production, sponsored by the Department, as stage manager, set designer, lighting designer, costume designer, or director.

Prerequisite: (THEA121) OR (THEA117) OR (THEA134) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110)

Corequisite: None

THEA628 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Examines the social, cultural and politically powerful connections between our gender identities (as they have been historically constructed) and the various modes of performance (including live theatre, television, film, games, and other digital media) that continue to represent those gendered identities and, in doing so, significantly influence how we both investigate and create history.

Prerequisite: None

Corequisite: None

WMST101 Introduction to Women's Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the social construction of gender and the interconnections between gender, race, and power in the lives of women. Using feminist and diverse culture perspectives, students will examine such issues as work, family, sexuality, and religion and will work to find strategies to create a more egalitarian society.

Prerequisite: None

Corequisite: None