

ACCOUNTING COURSES (ACT)

4412 National Security Affairs/Preparation for Active Duty I (3)

A course that examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.

L412 Leadership Laboratory I (1)

Leadership laboratory is mandatory for AFROTC cadets and it complements this course by providing cadets with advanced leadership experiences, giving students the

- 4411 High Civilizations of the New World (3)**
An anthropological examination of the sociocultural systems that formed the foundations of pre-industrial high civilizations of the New World and a survey of past cultures that achieved this degree of development.
- 4420 Forensic Osteology (3)**
A survey of the methods used in recovering human osteological remains from field sites. It includes methods used in identifying, preserving, and recording data from human osteological remains, and the methods used in determining the cause of death, age, sex, race, and stature of individuals from human osteological remains.
- 4491-4492 Guided Independent Research (1 to 3 credit hours per course per semester)**
Undergraduate research with attention to critical evaluation of research techniques, methods and procedures. *Prerequisites: Junior or senior standing with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written request is to be submitted to the department chairperson at least two weeks in advance of the term in which the study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the office of University Records. Guided independent research may be taken only in the applicant's major or minor field.*
- 4493-4494 Guided Independent Study (1 to 3 credit hours per course per semester)**
Supervised study through field and laboratory projects, guided readings, creative endeavors or achievement of specific skills. *Prerequisites: Junior or senior standing, with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written request is to be submitted to the department chairperson at least two weeks in advance of the term in which the study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the office of University Records. Guided independent research may be taken only in the applicant's major or minor field.*
- 1145 Foundations of Form and Space (3-3)**
Introduction to the principles, elements, and concepts of two-dimensional space.
- 1150 Foundations of Time and Space (3-3)**
Introduction to the principles, elements, and concepts of three- and four-dimensional space.
- 2201 Introductory Drawing (3-3)**

ART AND DESIGN COURSES (ART)

- 1133 Visual Arts (2-2)**
Visual arts and their relationship to human needs and aspirations. *NOTE: Credit for this course may not be applied toward any program in art.*
- 1134 Honors Visual Arts (2-2)**
Visual arts and their relationship to human needs and aspirations. Presentation of aesthetic, cultural and social issues related to art and its making. *NOTE: Credit for this course may not be applied toward any program in art.*

COURSE DESCRIPTIONS · 98

3302 History of the Arts (3)

An analysis of examples of art from diverse periods with an emphasis on trends and patterns and the interactions of art with various aspects of social, political, and intellectual developments.

3308 <<dti.troy>> Principles of Digital Design (3-3)

Introduction to the fundamental principles of graphic

ATHLETIC TRAINING EDUCATION COURSES (AT)

- 4435 Collaborative Studio (3-3)**
An integrative art studio experience joining students from each concentration area. Thematic, supervised exploration of a chosen medium. *Prerequisite: Must have completed the third level of an art studio concentration.*
- 4472 Internship in Art Education (9)**
The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a university supervisor for a period of one full semester. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience. *Prerequisite: Admission to TEP; Co-requisite: IED 4454 Internship Seminar for Interdisciplinary Education.*
- 4481 Methods and Materials for the Art Teacher (3-3)**
Teaching methods, selection, organization, and use of art materials. *Prerequisite: ART 3361 and admission to TEP.*
- 4491 Guided Independent Research (1 to 3 credits per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4492 Guided Independent Research (1 to 3 credits per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4493 Guided Independent Study (1 to 3 credits per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4494 Guided Independent Study (1 to 3 credits per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4496 Internship (3-6)**
Experiential learning in the context of an art- or design-related profession. Must be approved by the department chairman and cooperating host organization or business. May be repeated for credit.
- 4499 Senior Thesis (3-3)**
Requirement for all graduating art or design majors in a comprehensive program of study. Production of a body of work related to their area of concentration and the production of a written manifesto and statement. This course should be taken during the semester of graduation.
- 1101 Orientation to Athletic Training Education (1-1)**
Acquaints the Pre-Athletic Training Education student with the six cognitive domains of athletic training education and the athletic training education competencies.
- 2201 Clinical Experiences in Athletic Training (1-3)**
Acquaints the entry-level athletic training student with athletic training educational competencies in the clinical proficiencies in Athletic Emergency Plan (EAP), CPRO, basic life support techniques, use of crutches and canes,

L395 Care and Prevention of Athletic Injuries and Illnesses I Clinical Experiences (1-1)

Acquaints the entry-level athletic training student with athletic training educational competencies in the clinical proficiencies, risk management, injury prevention, assessment and evaluation, psychosocial intervention and referral, and health care administration. *Prerequisite: Acceptance into ATEP (first-year status).*

3396 Evaluation of Athletic Injuries and Illnesses I (3-3)

Acquaints the entry-level athletic training student with athletic training educational competencies as they relate to acute care of injuries and illnesses to the lower extremity of the human body. *Prerequisite: Acceptance into ATEP (first-year status).*

L396 Evaluation of Athletic Injuries and Illnesses I Clinical Experiences (1-1)

Acquaints the entry-level athletic training student with athletic training educational competencies in the clinical proficiencies of injury prevention, assessment and evaluation, and acute care of injuries and illnesses as they relate to the lower extremity. *Co-requisite: AT 3396 (first-year status).*

3397 Evaluation of Athletic Injuries and Illnesses II (3-3)

Acquaints the entry-level athletic training student with athletic training educational competencies as they relate to injury prevention, assessment and evaluation, and acute care of injuries and illnesses to the upper extremity. *Prerequisites: AT 3396, L396 (first-year status).*

L397 Evaluation of Athletic Injuries and Illnesses II Clinical Experiences (1-1)

Acquaints the entry-level athletic training student with the knowledge of athletic training and educational competencies in the clinical proficiencies of injury prevention, assessment and evaluation, acute care of injuries and illnesses to the upper extremity. *Prerequisites: AT 3396, L396. Co-requisite: AT 3397 (first-year status).*

4447 Therapeutic Modalities (2-2)

Acquaints the entry-level athletic training student with athletic training educational competencies as they relate to the use of therapeutic modalities. *Prerequisites: AT 3397, L397 (second-year status).*

4448 Therapeutic Exercises (2-2)

Acquaints the entry-level athletic training student with the knowledge of the athletic training educational competencies as they relate to the use of therapeutic exercises. *Prerequisites: AT 3301, 4447 (second-year status).*

4401 Clinical Experiences in Athletic Training (2-3)

Acquaints the entry-level athletic training student with athletic training educational competencies in the clinical proficiencies as they relate to pharmaceutical products, poison control services, administration of bronchodilators and epinephrine, and recognition of the signs, symptoms and knowledge of the athletic trainingll

- 2229 General Ecology (3)**
The relationships of living organisms to one another and to the nonliving environment. Basic ecological concepts with the emphasis on bioenergetics, limiting factors, adaptation to a changing environment, the niche, ecological pyramids, and succession. *Prerequisites: BIO 1101, L101 and CHM 1143, L143. Co-requisite: BIO L229.*
- L229 General Ecology Lab (1-3)**
Introduction to the terminology, procedures and equipment for sampling biotic and abiotic components of ecosystems, the functional and dynamic features of ecosystems, and biotic interactions. *Prerequisites: BIO 1101, L101 and CHM 1143, L143. Co-requisite: BIO 2229.*
- 3307 Invertebrate Zoology (3)**
Major and minor phyla of invertebrates with emphasis on anatomy, classification, life histories, and phylogeny. *Prerequisites: BIO 1101, L101. Co-requisite: BIO L307.*
- L307 Invertebrate Zoology Lab (1-3)**
Anatomy, classification, and life histories of invertebrates. *Prerequisites: BIO 1101, L101. Co-requisite: BIO 3307.*
- 3308 Vertebrate Zoology (3)**
Taxonomy, structure, life histories, behavior, and distribution of vertebrates. *Prerequisites: BIO 1101, L101. Co-requisite: BIO L308.*
- L308 Vertebrate Zoology Lab (1-3)**
Taxonomy, structure, life histories, and behavior of vertebrates. *Prerequisites: BIO 1101, L101. Co-requisite: BIO 3308.*
- 3320 Genetics (3)**
Principles of heredity, from basic Mendelian concepts through molecular genetics. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143, MTH 1112 or equivalent and MTH 2210 or equivalent, or permission of chair. Co-requisite: BIO L320.*
- L320 Genetics Lab (1-3)**
Basic laboratory techniques in genetics, including the genetics of common laboratory organisms. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143, MTH 1112 or equivalent and MTH 2210 or equivalent, or permission of chair. Co-requisite: BIO 3320.*
- 3325 Plant Form and Function (3)**
The development, structure, and function of plant tissues and organs. Primary emphasis on anatomical, morphological, and physiological features of angiosperms. *Prerequisites: BIO 1101, L101. Co-requisite: BIO L325.*
- L325 Plant Form and Function Lab (1-3)**
The development, structure, and function of plant tissues and organs, with the primary emphasis on structures. *Prerequisites: BIO 1101,*

- L382 Immunology Lab (1-3)**
 Analysis of immunological techniques used in research and clinical settings. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO 3382.*
- 3386 Hematology (3)**
 The study of blood cells and blood-forming organs under normal and diseased states. *Prerequisites: BIO 3320, L320, 3372, L372, CHM 3342, L342. Co-requisite: BIO L386.*
- L386 Hematology Lab (1-3)**
 Cytological and instrumental analyses of blood cells and blood forming organs. Hematological analysis of normal and diseased states. Introduction to blood-banking procedures. *Prerequisites: BIO 3320, L320, 3372, L372, CHM 3342, L342. Co-requisite: BIO 3386.*
- 4402 Spring Flora (4-7)**
 Survey of vascular plants from different habitats in southeast Alabama. Principles of plant taxonomy, including history and systems of classification and nomenclature, the use of dichotomous keys, and general herbarium techniques. Emphasis is placed on plant identification and habitat types. *Prerequisites: BIO 1101, L101, 2229, L229.*
- 4405 Entomology (3)**
 Orders of insects with the emphasis on morphology, taxonomy, and life cycles. *Prerequisites: BIO 1101, L101. Co-requisite: BIO L405.*
- L405 Entomology Lab (1-3)**
 Morphology, classification, and identification of insects. A collection is required. *Prerequisites: BIO 1101, L101. Co-requisite: BIO 4405.*
- 4410 Animal Behavior (3)**
 Classical and current concepts of animal behavior including individual and social behavioral patterns. *Prerequisites: BIO 3320, L320. Co-requisite: BIO L410.*
- L410 Animal Behavior Lab (1-3)**
 Experimental and observational techniques in behavior. *Prerequisites: BIO 3320, L320. Co-requisite: BIO 4410.*
- 4413 Limnology (3)**
 The physical, chemical, geological, and biological aspects of freshwater ecosystems as influenced by activities in surrounding watersheds. *Prerequisites: BIO 2229, L229, CHM 1143, L143. Co-requisite: BIO L413.*
- L413 Limnology Lab (1-3)**
 Field and laboratory exercises in lake and stream science, including instrumentation, measurement, sampling, and analysis. *Prerequisites: BIO 2229, L229, CHM 1143, L143. Co-requisite: BIO 4413.*
- 4414 Food Microbiology (3)**
 Food spoilage, food preservation, food-borne pathogens, microbial metabolism, and molecular techniques. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO L414.*
- L414 Food Microbiology Lab (1-3)**
 Advanced microbiological laboratory techniques including enumeration and analysis of bacteria in food, water, and dairy products. *Prerequisites: BIO 3372, L372, CHM 3342, L342. Co-requisite: BIO 4414.*
- 4416 Environmental Microbiology (3)**
 The taxonomy, diversity, and ecology of microbial populations in ecosystems, with the emphasis on the roles that they play in biogeochemical cycles, their contributions to metabolic diversity, their interactions with animals and plants, their niches and bioremediation. *(nd bio8)pD-0. heo33*

- 4430 Applied Genetics (3)**
Advanced studies in genetics with emphasis on cytogenetics and molecular genetics. *Prerequisites:* BIO 3320, L320, 3372, L372, CHM 3343, L343. *Co-requisite:* BIO L430.
- L430 Applied Genetics Lab (1-3)**
An introduction to procedures and equipment used in the study of cytogenetics and molecular genetics. *Prerequisites:* BIO 3320, L320, 3372, L372, CHM 3343, L343. *Co-requisite:* BIO 4430.
- 4432 Comparative Vertebrate Anatomy (3)**

COURSE DESCRIPTIONS · 104

4476 Special Topics in Biology (1 to 4 credit hours per course per semester)

Specialized topics not generally included in course offerings. *Prerequisite: Permission of instructor.*

4478 Cell Biology (3)

Cell structure and function with the emphasis on biochemical and molecular mechanisms. Topics include cell division, movement, differentiation, and recognition. *Prerequisites: BIO 3320, L320, 3372, L372, CHM*

4493-4494 Guided Independent Study (1 - 3 credit hours per course per semester)
Additional information is indexed under Guided Independent Research and Study. *NOTE: This course may not be substituted for any required course.*

4499 Internship (1-3 credit hours per course per semester)
Additional information is indexed under Guided Independent Research and Study. *NOTE: This course may not be substituted for any required course.*

CHEMISTRY COURSES (CHM)

1115 Survey of Chemistry (3)
The course will provide an overview of some of the basic concepts and principles of chemistry. Starting with the structure of the atom, the course will proceed on to basic chemical reactions, the formation of ions, states of matter, chemical equilibrium, and chemical bonding, and will incorporate examples from the biological sciences. *Co-requisite: CHM L115.*

L115 Survey of Chemistry Lab (1 - 2)
The laboratory sessions will provide an overview of some of the basic concepts and techniques of general chemistry experiments. The students will conduct experiments that illustrate the concepts and principles learned in the Survey of Chemistry course lectures. *Co-requisite: CHM 1115.*

1142 General Chemistry I (3)
Emphasis is placed on the periodic table and stoichiometry, including chemical properties, physical states, and structure. *Prerequisite: Pass MTH 1112 with at least a C (or a score of 0, 1, or 5 on the math placement exam).* *Co-requisite: CHM L142.*

L142 General Chemistry I Laboratory (1 - 3)
Experiments dealing with the periodic table, atomic structure, the gas laws, and stoichiometry. *Co-requisite: CHM 1142.*

1143 General Chemistry II (3)
Acid-base theory, solutions, chemical equilibria, thermodynamics, kinetics, and electrochemistry. *Prerequisites: CHM 1142 and L142. Co-requisite: CHM L143.*

L143 General Chemistry II Laboratory (1 - 3)
Experiments in acid-base theory, solutions, chemical equilibria, thermodynamics, kinetics, and electrochemistry. *Co-requisite: CHM 1143.*

2242 Analytical Chemistry (3)
The theoretical principles of modern quantitative wet-chemical methods for determining composition and concentration with rigorous treatment of solution equilibria. *Prerequisites: CHM 1143 and L143. Co-requisite: CHM L242.*

L242 Analytical Chemistry Laboratory (1 - 3)
The practice of modern quantitative wet-chemical techniques in analytical chemistry. *Co-requisite: CHM 2242.*

3342 Organic Chemistry I (3)
An introduction to the chemistry of carbon compounds that develops the theoretical principles underlying organic materials. *Prerequisites: CHM 1143 and L143. Co-requisite: CHM L342.*

L342 Organic Chemistry I Laboratory (1 - 3)
Experimental techniques and skills for preparing, manipulating, and reacting organic molecules. *Co-requisite: CHM 3342.*

3343 Organic Chemistry II (3)
A continuation of CHM 3342 with emphasis on modern organic synthesis. *Prerequisites: CHM 3342 and L342. Co-requisite: CHM L343.*

L343 Organic Chemistry II Laboratory (1 - 3)
Experimental techniques and skills for preparing, manipulating, and reacting organic molecules. *Co-requisite: CHM 3343.*

3350 Principles of Physical Chemistry (3)
An introduction to the principles of chemical thermodynamics, reaction kinetics and chemical equilibrium. *Prerequisites: CHM 3343; PHY 2253 and PHY L253, or PHY 2263 and PHY L263. Co-requisite: CHM L350.*

L350 Principles of Physical Chemistry Laboratory (1 - 3)
Practical applications of thermochemistry, colligative properties, and reaction kinetics. *Co-requisite: CHM 3350.*

3357 Biochemistry I (3)
Physical and chemical properties of proteins, nucleic acids, fatty acids, and carbohydrates with emphasis on the relationship between chemical structure and biological function. *Prerequisite: CHM 3343. Co-requisite: CHM L357.*

L357 Biochemistry Laboratory (1 - 3)
Laboratory experiments emphasizing the bioche on0067 0 10 TcLSb pic

3382 Physical Chemistry II (3)

A continuation of CHM 3381 with an introduction to

- 4491 Guided Independent Research (1 to 3 credit hours per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4492 Guided Independent Research (1 to 3 credit hours per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4493 Guided Independent Study (1 to 3 credit hours per course per semester)**
Additional information is indexed under Guided Independent Research and Study.
- 4494 Guided Independent Study (1 to 3 credit hours per course per semester)**
Additional information is indexed under Guided Independent Research and Study.

COMMUNICATION COURSE (COM)

- 1110 Effective Communication (3)**
Practice in both oral and written communications. Focuses on improvement and development of present listening, speaking, reading and writing abilities and their applications in both academic and professional settings. *Prerequisite: placement.*

COMPUTER SCIENCE COURSES (CS)

- 2244 Computer Programming I (3)**
An introduction to a programming language. Programming fundamentals include program structure, assignment, data types, repetition, input/output, flow of control, and functions. Program design development and testing is emphasized. *Prerequisite: MTH 1112.*
- 2260 Computer Programming II**
A continuation of Computer Science I to include advanced programming techniques including application of arrays and advanced input/output. Students design, implement, and test a number of moderately large programs. *Prerequisites: CS 2244 and MTH 1125 or 2201.*

4421 Ethics in Criminal Justice (3)

An introduction to concepts of ethics and an examination of contemporary ethical issues in the field of criminal justice.

4430 Selected Topics in Criminal Justice (3)

An examination of a criminal justice topic chosen for its current or special interest and importance and that is not given in-depth coverage in other courses; selection topics will vary with each course offering (although a particular topic may be offered more than once.)

4435 Grant Writing (3)

A detailed examination of how to apply to governmental and private entities for funding of various programs and projects in the field of criminal justice.

4440 Terrorism (3)

A critical examination and analysis of major issues, definitions, and controversies associated with the development of terrorism in the modern world. Historical, religious, and psychological and sociological aspects and explanations of terrorism will be covered, along with the characteristic means and methods terrorist groups employ.

4442 Criminal Investigation and Evidence (3)

- 2221 Technical Theatre (2-3)**
A study of standard technical practices and equipment for the theatre.
- 2245 Stagecraft Lab (1-3)**
Stagecraft Lab provides the basic elements of theatrical production through participation in acting (actors selected through audition), management, and/or technical theatre, including scenery, props, lighting, sound, costumes, makeup, business and publicity. All majors must complete four semesters of DRA 2245 with a rotation of crew work in scenery, lighting, costumes, and marketing.
- 3301 Acting I (2-3)**
A study of basic principles, terminology, and disciplines of the actor, including relaxation, concentration, movement, and characterization.
- 3302 Costume Techniques (2-3)**
A study of the techniques of costume construction, including methods of drafting patterns, building and/or modifying costumes, and the application of arts and crafts.
- 3303 Makeup Techniques (1-2)**
A study of the theory and techniques of stage make-up. Includes makeup for theatre, film, and video.
- 3304 Lighting Techniques (2-3)**
A study of stage lighting equipment and lighting practices.
- 3310 Communication Arts Seminar (1-1)**
An introduction to the methods of designing, researching, and reporting the solutions to rhetorical and theatrical design/technology or acting/directing problems, development of public speaking/forensics presentations or critical analyses of language arts subjects. Includes focus on standards of professional communication and fine arts organizations as well as graduate and/or professional school opportunities. Also includes requirement for completion of 20 attendance credits at communication and fine arts events that may be earned during the first two years of enrollment. Special arrangements through department evaluation for transfer students.
- 3315 Audition and Portfolio Techniques (1-2)**
A study of the practices and tools of the actor/designer/technician in the development of the professional audition. It includes the resume, headshot, interview, prepared monologues, and portfolio. *Prerequisite:* DRA 3301, 2245, or permission of instructor.
- 3316 Acting II (2-3)**
A study of advanced concepts of acting, focusing on script analysis and character development along with further study of voice, movement, and scene dynamics. *Prerequisite:* DRA 3301 and SPH 2251 or permission of instructor.
- 3321 Scenic Design (3-3)**
The principles and techniques of drafting and designing in a variety of theatrical spaces. *Prerequisite:* DRA 2221 and completion of the DRA 2245 rotation or permission of the instructor.
- 3331 Costume Design (3-3)**
A study of the theory, principles, and techniques of costume design applied to a series of theatrical projects. *Prerequisite:* Completion of the DRA 2245 rotation or permission of the instructor.
- 3344 Lighting Design (3-3)**
A study of the principles of lighting design and equipment applications. Also covers drafting techniques for lighting. *Prerequisite:* DRA 3304 and completion of the DRA 2245 rotation or permission of the instructor.
- 3345 Advanced Stagecraft Lab (1-3)**
A continuation of Stagecraft Lab designed for the upper level student. *Prerequisites:* DRA 2245 rotation or permission of instructor.
- 3350 Script Analysis (2-2)**
Script Analysis is a course focusing on the nature of the text, playwright's purpose, dramatic structure, and style. The course will examine how the actor, director, designer, and technician approach a play and how that understanding translates into the staging.
- 3352 Sound Techniques (2-2)**
A study of digital and analog recording techniques, recording equipment, and application.
- 3354 Rendering Techniques for the Theatre (2-2)**
A study and application of traditional and experimental techniques for theatrical rendering, including watercolor, markers, pastels, pencils, and other media.
- 4443 Theatre History I (3-3)**
Through the study of literature and dramaturgy, this course traces the history of theatre from the origins of drama to English Restoration drama of the 18th century. *Prerequisite:* Completion of ENG 2205.
- 4444 Theatre History II (3-3)**
Through the study of literature and dramaturgy, this course traces the history of the theatre from the 19th century to the present. *Prerequisite:* Completion of ENG 2206
- 4451 Directing I (3-3)**
Script analysis and directing principles with studies in the direction of scenes from contemporary plays. *Prerequisite:* DRA 3301.
- 4452 Directing II (2-3)**
Advanced study of directing, extending to period styles and culminating with the production of a one-act play. *Prerequisites:* DRA 3301 and DRA 4451.

COURSE DESCRIPTIONS · 112

4455 Theatre Senior Capstone (2)

Comprehensive exit assessment of student competencies in theatre. The student will develop a major field-related project, pass an exit exam, and complete a program assessment. Project proposals must be submitted prior to the semester in which they will be developed. Final grade will be determined by speech and theatre faculty.

4491-92 Guided Independent Research (1-3 credit hours per course)

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The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience.

the term in which study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the Office of University Records. Guided independent research may be taken only in the applicant's major or minor field.

- 4493-4494 Guided Independent Study (1-3)**
 Supervised study through field or laboratory projects, guided readings, creative endeavors or achievement of specific skills. *Prerequisites: junior or senior status, permission of guiding professor, approval of department chairperson and the dean. A written request is to be submitted to the department chairperson at least two weeks in advance of the term in which study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned.*
- 4499 Technology Across the Curriculum (3)**
 This course prepares the student to use a variety of technologies in developing curriculum and planning instruction for diverse learners in grades K-6. Attention is given to the history of technology, software selection and the integration of technology into the curriculum by matching technology resources and tools to instructional needs.
- 9914 Environmental Science: Project WET (1)**
 Project WET (Water Education for Teachers) is an interdisciplinary, supplementary environmental and conservation education program. The goal of Project WET is to facilitate and promote awareness, appreciation, knowledge, and stewardship of water resources.
- 9915 Environmental Science: Aquatic WILD (1)**
 Aquatic Project WILD is an interdisciplinary, supplementary environmental and conservation education program that explores the fascinating worlds of water and aquatic habitats they support.
- 9920 Youth with Disabilities Leadership Forum (3)**
 This course is designed for education and human services students. The purpose of this course is to provide field experience with youth with disabilities. Students will serve as counselors who conduct activities, guide discussion groups, and provide feedback and evaluation. *Prerequisite: permission of the instructor.*
- 9932 Environmental Science: Project WILD (1)**
 Project WILD is an interdisciplinary, supplementary environmental and conservation education program emphasizing wildlife. Project WILD emphasizes the intrinsic, ecological, and other values of wildlife, as well as the importance of wildlife as a basis for understanding the fragile grounds upon which all life rests.
- 9934 Environmental Science: Project Learning Tree (1)**

the term in which study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the Office of University Records. Guided independent research may be taken only in the applicant's major or

- 2260 Introduction to Technical and Professional Writing (3)**
 Technical communications for science, business, and professional work. Emphasis on writing for specific purposes to particular audiences in an organizational setting. Preparation of documents such as technical description of a mechanism or process, instructions, recommendations, reports, and resumes. *NOTE: course is a prerequisite for all required 3300- and 4400-level courses in the Professional Writing Emphasis. Students may take elective courses concurrently with this course.*
- 2265 History of the American Cinema (3)**
 A study of the history and development of the American cinema from its inception (c. 1895) to the end of the studio system (c. 1945). Emphasis will be on social and historical ramifications, on appreciation of film as a literary and art form, and on the major pioneers and contributors to the American movies. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3301 Women's Literature (3)**
 Representative works of literature by women. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3303 Writing across the Disciplines (3)**
 An advanced study of writing expository, non-fiction prose which focuses on a variety of academic disciplines. *NOTE: This course may not be used to meet English degree requirements but may be taken for free elective credit. Prerequisite: 6 semester hours of 2000-level English courses*
- 3305 Folklore/Mythology (3)**
 A multicultural survey of the forms and varieties of the mythology and folklore of major western cultures, emphasizing stories of Scandinavian, German, British, and American origin, and the application of these forms in modern cultures and literature. This course is recommended for English teachers seeking middle school certification. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3310 Fiction and Film (3)**
 Representation of fiction on film, with attention to visual techniques and the translation and representation of major literary themes. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3315 Modern Drama (3)**
 Study of plays written between 1900 and the present. List of plays may vary with each offering. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3320 Introduction to Linguistics (3)**
 Overview to linguistics, the scientific study of language. The course will acquaint students with the grammatical, social, biological, and technological applications of language. *Prerequisites: ENG 1101, 1102*
- 3326 Science Fiction (3)**
 An exploration of the literary, social, and generic importance of science fiction. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3341 Advanced Grammar (3)**
 Detailed study of the structural system of English grammar. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3345 Technical and Professional Editing (3)**
 Principles and practices of editing technical and scientific documents. Overview of the editing process; defining the editor's rules and responsibilities, revising at structural and sentence levels, and addressing stylistic conventions of technical fields. to technical and scientific documents such as reports, proposals, and user manuals. *Prerequisite: ENG 2260.*
- 3351 Introduction to Creative Writing I (3)**
 Practice in writing poetry, short stories, and/or plays, along with a concentrated study of the techniques and principles of creative writing in each genre. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3352 Advanced Creative Writing I (3)**
 Continued practice in writing poetry, short stories, and/or plays, along with a more advanced study of the techniques and principles of creative writing in each genre. *Prerequisite: 6 semester hours of 2000-level English courses; ENG 3351 or permission of instructor*
- 3353 Advanced Creative Writing II (3)**
 Practice in writing poetry, short fiction, or plays for class and instructor evaluation. *Prerequisite: 6 semester hours of 2000-level English courses; ENG 3351 or permission of instructor*
- 3354 Advanced Nonfiction Writing (3)**
 The literature of fact. Emphasis on student writing and analysis of nonfiction forms, such as personal narrative, autobiography, lyric in prose, and New Journalism. *Prerequisite: 6 semester hours of 2000-level English courses; ENG 3351 or permission of instructor*
- 3355 Verse Writing (3)**
 Development of techniques in the practice of poetry, including expression through metrical patterns, rhyme, rhythm, imagism, metaphor, and symbolism. *Prerequisite: 6 semester hours of 2000-level English courses; ENG 3351 or permission of instructor*
- 3356 Form and Theory of Fiction (3)**
 Primarily a reading course for writers. Examination of the classic texts of literary theory; analysis of the use and purpose of the elements of fiction; and discussion of fiction form, from the short-short to hyper-text. *Prerequisite: 6 semester hours of 2000-level English courses*
- 3357 Form and Theory of Nonfiction Literature (3)**
 Examination of the theories behind various forms of non-fiction literature, whether autobiography, biography, the essay, diaries, and/or travel writing, with special emphasis on the historical evolution of a particular form. List of readings will vary with each course offering. *Prerequisite: 6 semester hours of 2000-level English courses*

3361 Children's Literature (3)

Literature for children. *Prerequisite: 6 semester hours of 2000-level English courses. NOTE: No credit toward English major or minor.*

3362 The Arthurian Legend through the Ages (3)

Examination of Arthur not only in literary and historical works from its earliest traces in the Middle Ages to the present, but also in archaeology, the visual and decorative arts (especially painting and sculpture), manuscript decoration, film, musical, and opera. *Prerequisite: 6 semester hours of 2000-level English courses*

~~3365 Child and Adolescent Writing and Professional Writing (3)~~
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- 3312 Geography of Latin American (3)**
An analysis of the major physical and cultural aspects of Middle and South America. *Prerequisite: Nine hours of social science.*
- 3326 Geography of the Russian Realm (3)**
An analysis of the physical and cultural aspects of Russia and the other former republics of the Soviet Union. *Prerequisite: Six hours of social science.*
- 3331 Geography of the Middle East and North Africa (3)**
Physical setting, resource distribution, economy, population characteristics, and geopolitical importance of the region.
- 3350 Weather and Climate (3)**
A study of the physical properties of weather and climate. *Prerequisite: Twelve hours of science or social science.*
- 4402 Political Geography (3)**
Analysis of the reciprocal ef

tums, elevations, and mapping. The use of computer-aided drawing software to produce maps and plats is required. *Prerequisite: MTH 1115. Co-requisite: GEM L220.*

L220 Basics of Cartography and Surveying Lab (1)

This field laboratory provides the opportunity to use instrumentation to make the necessary measurements to produce computed products. Focuses on the use of a field book to record measurements, the analysis of field measurements, and the use of survey instrumentation.

3309 Land Parcel Administration and Law (3)

The geomatics student is introduced to the basic principles of land tenure and the cadastre. The major component of the course is the study and application of survey statute and related case law. The concepts underlying the hierarchy of evidence, sequential versus simultaneous conveyances, adverse possession, riparian rights, land descriptions, and the U.S. Public Land Survey System are explored. *Prerequisite: GEM 2220 or approval of the Geomatics Program Coordinator. Co-requisite: GEM L309.*

L309 Land Parcel Administration and Law Lab (1)

This laboratory explores the impact of land survey law on the practice of surveying and mapping in the state of Alabama. Focuses on the practice of writing legal descriptions, the structure of the U.S. Public Land Survey System, and courthouse research.

3310 Land Survey Practice (3)

The issues of boundary location and retracement are central to this course. Focuses on Alabama survey history, the practice of surveying in Alabama, professional ethics, and the Standards of Practice for Surveying in Alabama. *Prerequisite: GEM 3309.*

L310 Boundary Retracement Seminar (1)

The student gains practical field experience in an off-campus field boundary retracement project provided as a joint effort of Troy University, the Alabama Society of Professional Land Surveyors, and the Federal Bureau of Land Management. *Prerequisite: GEM 3310.*

3330 Advanced Measurement Analysis (3)

Survey equipment calibration, survey astronomy, topographic mapping, control leveling, instrumentation error, and the propagation of error through survey calculations. This course is the second course of a one-year

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Prerequisite: MTH 1112 or equivalent and IS 2241, or consent of instructor.

- L390 Introduction to GIS Lab (1)**
The laboratory provides the student the opportunity to learn ArcView GIS software in order to produce GIS products using existing databases.
- 3391 Applications of Geographic Information Systems (3)**
This course provides a study of common applications of GIS with an emphasis on land information systems and land management. The course also provides further study in database design, digital base map analysis and testing, and spatial analysis. *Prerequisite: GEM 3390 or consent of the instructor.*
- L391 Applications of GIS Lab (1)**
This laboratory provides the student the opportunity to learn and use ArcInfo GIS to accomplish a full range of GIS applications.
- 4405 Route and Construction Surveying (2)**
Explores the theoretical foundations of route and construction surveying. Course topics are coordinate geometry (COGO), horizontal and vertical curve models, spirals, alignments, stationing, cross sections, areas, volumes, and route design elements. *Prerequisites: GEM 1100 or the equivalent, and GEM 3330. Co-requisite: GEM L405.*
- L405 Route and Construction Surveying Lab (1)**
This field laboratory applies the principles of route and construction surveying, the use of civil design software, and the use of data collectors for practical design and field layout.
- 4407 Land Development (1)**
Explores the concepts and problems associated with the design and construction of subdivisions and related infrastructure. *Prerequisites: GEM 1100 or the equivalent, and GEM 4409. Co-requisite: GEM L407.*
- L407 Subdivision Design Practice (1)**
This computer laboratory provides the student the opportunity to design and create those drawings necessary for local government approval of the typical subdivision.
- 4409 Hydrology (3)**
Explores several models used to compute runoff estimates based on particular rainfall events. Course topics are the hydrologic cycle, rainfall intensity, runoff models, hydrographs, storm sewer design, culvert design, open channel flows, watershed delineation, water detention and retention structures, and onsite sewage disposal systems. *Prerequisite: GEM 1100 or the equivalent, MTH 1115. Co-requisite: GEM L409. Recommended completion of PHY 2253 or the equivalent.*
- L409 Hydrology Lab (1)**
Compute peak runoff estimates, and open channel designs. The hydrology components of Microstation and AutoCAD are explored with respect to solving and presenting peak runoff solutions. A design project involving the use of large-scale topographic maps will be assigned.
- 4495 Cooperative Work Experience I (2)**
The geomatics student may register for GEM 4495 after being hired by an eligible employer participating in the Cooperative Work Experience Program. After completion of the semester, the student is expected to submit a written report to the Geomatics Program Coordinator detailing the work experience and present a brief oral report to his/her peers in the following semester in a scheduled geomatics class. *Prerequisites: Completion of GEM 2220, maintenance of a 2.0 grade point average, and approval of the Geomatics Program Coordinator.*
- 4496 Cooperative Work Experience II (2)**
The geomatics student may register for GEM 4496 for the second semester of cooperative work experience. The student must be in residence at Troy University for a minimum of one semester after completion of GEM 4495 before leaving for cooperative work experience under GEM 4496. *Prerequisites: Completion of GEM 4495 and approval of the Geomatics Program Coordinator.*
- 4499 Geomatics/GIS Projects (2)**
This course offers the geomatics/GIS student with senior standing the opportunity to apply the fundamental principles and concepts learned in the study of geomatics/GIS to a particular problem or project. The student will state the problem, design an experiment to test a hypothesis concerning the problem statement, take the measurements, array the data, analyze the data, state conclusions, and place the study into a final report. *Prerequisite: IS 2240 and senior standing or consent of the geomatics program coordinator.*

GERMAN COURSES (GER)

Note: For additional information, see Placement in Foreign Language Courses.

- 1121 Introductory German I (3)**
Introduction to the German language and culture.
- 1122 Introductory German II (3)**
Introduction to the German language and culture.
- 2221 Intermediate German I (3)**
Emphasis on basic language skills and knowledge of German culture. *Prerequisite: GER 1122 or equivalent.*
- 2222 Intermediate German II (3)**
Emphasis on basic language skills and knowledge of German culture. *Prerequisite: GER 2221 or equivalent.*
- 4493-4494 Guided Independent Study (1-3 credit hours per course per semester)**
Additional information is indexed under Guided Independent Research and Study.

GREEK COURSES (GRK)

Note: For additional information, see Placement in Foreign Language Courses.

- 1111 Introductory Greek I (3)**
Introduction to the ancient Greek language with emphasis on pronunciation, basic Iasis

3391 Testing and Statistical Interpretation (3-3)
Test selection, analyzing test scores and measurement as a technique of evaluation in evaluation in health education and physical education. *Prerequisite: junior standing or above.*

3392 Water Safety Instructor for the Handicapped (1-1)
Organization and methods of teaching swimming to adapted students. *Prerequisite: A current valid WSI Certificate (Swimming Instructor Certificate).*

3395 Care and Prevention of Athletic Injury (2-2)
The study of basic care and prevention, evaluation, management and rehabilitation of athletic injuries. *Prerequisites: BIO 3347, L347, 3348, L348.*

4400 Sports Officiating and Programs in Intramurals (3-3)
Focuses on school and community recreation programs, including sports, games and officiating techniques.

4410 Motor Development (2-2)
An analysis of the ways in which children develop movement capabilities. *Prerequisite: Junior standing or above.*

4420 Community Health (3-3)
A study of community organization for health including environmental health, epidemiology, and medical services.

4421 Human Sexuality and Sex Education (3-3)
Sex roles and behavior. Methods and materials for sex education.

4422 Substance Abuse Education (3-3)
A study of the abuse of drugs in society. An em.8067 0 TD0.0027n. a(y.)6(i(y.)6()3.8(hav t)6.36(s)4.1(e)-.80s(or above.)Tj/TT4 1 Tf[placTf

physical education environment. Directed field requirements will be presented and observation hours will be conducted. *Prerequisite: Junior or senior level.*

- 4470 Theory and Techniques of Coaching Softball (2-2)**
Development of basic skills necessary for team play, squad organization, rules, scouting procedures, team conditioning, and equipment needs.
- 4474 Exercise Physiology (3-3)**
Physiological mechanisms and adaptations of cells, tissues, organs and systems during physical activity. *Prerequisite: HPR 3360 or BIO 3347/3348, and HPR 3391, 3352.*
- L474 Exercise Physiology Lab (1-1)**
Course will provide experience for applied exercise physiology principles as students are introduced to laboratory and field tests of muscular strength, anaerobic power, maximal oxygen uptake, body composition and other physiological measurements. *Prerequisite: HPR 4474.*
- 4475 Exercise Testing and Prescription (3-3)**
Course will examine the criteria for evaluation of health status of persons wishing to begin an exercise program, guidelines of establishing current fitness level, and the basic principles of exercise prescription. Levels of certification and criteria by ASSM will also be discussed. *Prerequisite: HPR 4474.*

4472 Internship in Health/Physical Education (9)

The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and a

- 3318 History of American Women (3)**
An introduction to the history of women in America from the 17th century to the present, exploring the major economic, religious, social, and political ideas and developments which have shaped their status and role in American history. *Prerequisites: HIS 1111 and 1112 or permission of instructor.*
- 3330 Historical Archeology (3)**
An examination of the historical research methods and archaeological techniques used to investigate and interpret archaeological sites dating from the prehistoric period.
- 3341 Medieval Europe (3)**
Western Europe from the fall of Rome to the Renais-

4412 The American Revolution and the New Nation, 1763-1815 (3)

Ideas and institutions which led to American independence, the creation of the American union, and the devel-

- 4470 Oral History (3)**
An introduction to the methods and practice of oral history.
- 4471 Local History (3)**
An exploration of history, historiographic issues, and methodology of local history in the United States. Provides opportunities to become familiar with sources used in studying local history and to gain practical experience in conducting local history research.
- 4472 Records Management (3)**
An introduction to the scope of managing records in an organization and to the practical tasks associated with establishing a records management program in a business, office of government, or non-profit organization. *Note: Credit in Archival Minor only.*
- 4473 Archives Practicum (3)**
Provides students with an opportunity to apply their knowledge of archival and records management theory and practice. Students will be assigned to work on projects at an archival repository chosen in cooperation with instructor. May be repeated once as an elective. *Note: Credit in Archival Minor only.*
- 4474 Internship in History Education (9)**
The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a

3370 Professional Communication Skills (3)
Principles and techniques of interviewing for human services professionals. Major emphasis is the building of empathic skills.

weeks in advance of the term the research is to be undertaken.

3390 Introduction to Manual Communication (3)
Students will learn basic signing techniques. This course is open to all students. Persons interested in learning manual communication who do not intend to complete an undergraduate degree are encouraged to audit or to enroll as special students.

3391 Intermediate Manual Communication (3)
Students will build upon the skills learned in HS 3390 and will begin to develop conversational styles of manual communication. *Prerequisite: HS 3390.*

3392 Advanced Manual Communication (3)
Students will learn an advanced conversational style of manual communication and will become proficient in advanced communication with the hearing impaired. *Prerequisite: HS 3391.*

3393 Orientation to the Hearing Impaired (3)
This course will provide an understanding of the medical, psychological, social, educational and vocational issues that professionals must understand to work effectively with persons who are hearing impaired.

4400-4410-4420 Human Service Field Experience I (3), II (3) and III (3)
Provides experiences in a variety of social and rehabilitation settings with an emphasis on the multiple natures of human problems and the impact these problems have on the disabled and disadvantaged. Includes a weekly seminar plus a minimum of 40 clock hours per semester hour spent in a particular agency setting. Clinical hours and responsibilities will be determined by internship supervisor. *Prerequisites: Senior level, HS 2230 and HS 3370 or permission of instructor. The field site must be approved by the practicum director by mid-term of the semester prior to the field experience.*

4491-4492 Guided Independent Research (1 to 3 credit hours per course per semester)
Additional information is indexed under Guided Independent Research and Study.

4493-4494 Guided Independent Study (1 to 3 credit hours per course per semester)
Additional information is indexed under Guided Independent Research and Study.

4498 Honors-Independent Study (1 to 3 credit hours per course per semester)
Advanced research and study for outstanding students in their major field. Culminates in a report to a departmental committee which includes invited faculty members in related fields. *Prerequisite: Senior level, 3.5 overall average, permission of guiding professor, and approval of department chair and dean. NOTE: A written request must be submitted to the department chair at least six*

**INFORMATION SYSTEMS COURSES
(IS)**

2241 Computer Concepts and Applications (3)
This course provides an interdisciplinary introduction to microcomputer literacy, word processing, spreadsheets, database, business graphics and the internet.

2244 Computer Programming I (3)
An introduction to a programming language is provided. The course presents programming fundamentals, including program structure, assignment, data types, input/output, flow of control, and functions. It includes top-down design, structured programming using the basic control structures, sequence, decision, and repetition, modularization, and encapsulation. *Prerequisite: Grade of C or higher in IS 2241 and MTH 1112, (MTH 2201 recommended).*

2260 Computer Programming II (3)
Advanced programming, including arrays, pointers, strings, the pre-processor, structures, list processing, and advanced I/O, is examined. Emphasis is placed on developing and testing moderately complex programs. *Prerequisite: IS 2244.*

3300 Introduction to Information Systems (3)
Introduction to information systems concepts, with an emphasis on describing information systems requirements, managing information resources, and applying information technology to the solution of business and management challenges. *Prerequisite: IS 2241. uisite: IS 2244.*

- 3349 Object-Oriented Programming II (3)**
Intermediate and advanced object-oriented programming concepts. Topics include error handling and debugging, file handling and database access, dynamic data exchange, creating linked and embedded objects, business graphics and reports, and advanced GUI design concepts. *Prerequisite: IS 3339.*
- 3380 Network Operating Systems (3)**
This course covers the deployment and administration of current network operating systems. Emphasis is placed on the practical application of installing and administration of PC-based network operating systems in a LAN environment. *Prerequisite: IS 3320.*
- 4430 Web Site Design (3)**
Includes coverage of web site creation, design, programming, planning, and maintenance. *Prerequisite: IS 3346 and IS 3330.*
- 4440 Database Management Systems II (3)**
Modeling data organization; representation of data relationships; data definition languages; data access via languages in context models; facilities provided by DBMSs; implementation techniques; operational requirements; a survey of state of the art DBMSs. *Prerequisite: IS 3346 and IS 3330.*
- 4443 Internet Development (3)**
Advanced application development using databases and an Internet application development environment. *Prerequisite: IS 3346 and IS 3330.*
- 4447 System Engineering and Project Management (3)**
This course covers issues and procedures of design, implementation, testing, documentation and management of computer information systems, as well as models and principles to manage information system projects. *Prerequisite: IS 3346.*
- 4450 Network Design and Management (3)**
This course covers the design and administration of essential network directory services. Emphasis is placed on the practical application of designing, installing, securing, and administering directory services using PC-based network operating systems in a LAN environment. *Prerequisite: IS 3380.*
- 4451 Network Infrastructure and Security (3)**
This course covers the administration of essential network infrastructure services. Emphasis is placed on the installing and administering of the following network services on PC-based network operating systems in a LAN environment: DNS, DHCP, remote access, WINS, IP routing, and security. *Prerequisite: IS 3380.*
- 4460 E-Commerce Design (3)**
This course introduces the basic concepts and language of e-commerce. Coverage includes the planning and development of an e-commerce site, including security, customer service, payment, and marketing. The course is designed to teach students to explore and evaluate e-commerce technologies, sites, and issues. *Prerequisite: IS 4447.*

INTERDISCIPLINARY EDUCATION COURSES (IED)

- 4454 Internship Seminar for Interdisciplinary Education (3)**
This course provides seniors an opportunity during internship to examine broad educational issues and concerns, topics on the state and local levels, and those of personal interest. The scope of the course ranges from juvenile law, classroom management professionalism, professional development for teachers and other course topics. *Prerequisite: Admission to TEP. Co-requisite: IED Internship.*
- 4472 Internship in Grades P-12 (9)**
The Professional Internship Program is the culminating clinical field-based experience for students seeking certification in a teaching field. The Professional Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a university supervisor for a period of one full semester. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience. *Prerequisite: Admission to TEP. Co-requisite: IED 4454.*
- 4491-4492 Guided Independent Research (1-3)**
Undergraduate research with attention to critical evaluation of research techniques, methods and procedures. *Prerequisites: junior or senior standing with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chairperson or dean. A written request is to be submitted to the department chairperson at least two weeks in advance of the term in which study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the Office of University Records. Guided independent research may be taken only in the applicant's major or minor field.*
- 4493-4494 Guided Independent Study (1-3)**
Supervised study through field or laboratory projects, guided readings, creative endeavors or achievement of specific skills. *Prerequisites: junior or senior status, permission of guiding professor, approval of department chairperson and the dean. A written request is to be submitted to the department chairperson at least two weeks in advance of the term in which study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned.*

JOURNALISM COURSES (JRN)

NOTE: Reasonable proficiency in keyboarding (25 wpm) is a prerequisite for all journalism courses except JRN 1101 and JRN 1103.

- 1100 Technologies in Journalism (3-4)**
An introduction to the technological advances in journalism and the promotion of an understanding of the impact of these advancements. Must make a C or better to take JRN 2201.

COURSE DESCRIPTIONS · 134

1101 Introduction to Mass Communications (3-3)

The newspaper and other communications media in modern society.

1102 Writing for Mass Media (3-4)

A basic course in preparing written materials for the mass media. *Prerequisites: ENG 1101 and 1102, JRN 1100, with grade of C or better in each course. May be taken concurrently with JRN 1100. Must make at least C or better in JRN 1102 before taking JRN 2201.*

1103 Introduction to Radio and Television (3-3)

An introduction to the electronic forms of mass communication with discussions on the theoretical and business aspects of radio and television, cable and corporate video communications, and an introduction to programming and regulations.

2201 Reporting (3-4)

3350 Advertising Sales (3-3)

Discussion of and practical experience in servicing accounts and selling advertisements. May require selling ads for the Tropolitan. *Prerequisite: JRN 2220.*

3365 TV Studio Techniques and Producing (3-4)

An introduction to the production elements, theories and procedures of producing news broadcasts for television. Lighting, set design, preparation, operation of equipment, graphics, editing, responsibilities of those members involved in the production, electronic news gathering

COURSE DESCRIPTIONS · 136

4491-4492 Guided Independent Research (1 to 3 credit hours per course per semester)

Additional information is indexed under Guided Independent Research and Study.

4493-4494 Guided Independent Study (1 to 3 credit hours per course per semester)

Additional information is indexed under Guided Independent Research and Study.

4495 Seminar (1-1)

Study of issues related to ethics in journalism, public relations and advertising. *Prerequisite: Senior standing or*

- 4406 Marsh Ecology (4)**
A study of the floral and faunal elements of various marine marsh communities. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4410 Introduction to Oceanography (4)**
A general introduction to the physics, chemistry, geology, and biology of the oceans. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4416 Marine Fish Diseases (4)**
Introduction to aquatic animal diseases, specifically fin fish and shellfish. Student will learn practical microbiological techniques for isolation and identification. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4418 Marine Behavioral Ecology (4)**
Examination of how animal behavior is influenced by and interacts with its environment, and the ecological and evolutionary significance of these behaviors in a marine setting. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4421 Marine Technical Methods (2)**
An introduction to the techniques, instrumentation and equipment necessary to perform marine research, emphasizing field methods. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4423 Marine Ecology (4)**
Lecture and laboratory studies of bioenergetics, community structure, population dynamics, predation, competition, and speciation in marine ecosystem. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4425 Coastal Ornithology (4)**
Study of coastal and pelagic birds with emphasis on ecology, taxonomy, and distribution. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4426 Coastal Zone Management (2)**
A review of ecological features and management policies for coastal communities, with a description of relevant state and federal programs. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4430 Dolphins and Whales (2)**
Lectures, audiovisual presentations, and practical exercises to guide students to further study of cetaceans. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143, BIO 4432, L432 or MB 4403.*
- 4434 Marine Geology (4)**
A study of the geology of the ocean basins, with special emphasis on the continental shelves, their sediments, and the sedimentary processes at work there. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143, introductory geology and MTH 4423.*
- 4435 Coastal Geomorphology (2)**
An introduction to coastal sediment processes and applied geomorphology with emphasis on waves, tides, and sedi-
- ments. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4437 Coastal Climatology (2)**
Study of the controlling factors and features of the world's climates, with particular attention to coastal areas and application and interpretation of climate data. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143.*
- 4460 Introduction to Neurobiology (4)**
The study of the structure, development, physiology, and pharmacology of the nervous systems and sense organs. *Prerequisites: BIO 4478, L478, PHY 2253, L253.*

MARKETING COURSES (MKT)

- 3361 Principles of Marketing (3)**
A managerial focus on the external environments and decision elements of marketing (promotion, price, product, distribution) faced by marketing management at the corporate and entrepreneurial levels of business.
- 3362 Advertising (3)**
The planning, creation, utilization, and place of advertising programs, media use, and research to support marketing strategy. *Prerequisite: MKT 3361.*
- 3363 Transportation Management (3)**
Management considerations in selection and effective utilization of various modes of transportation. *Prerequisite: MGT 3371; MKT 3361.*
- 3364 Services Marketing (3)**
Understand the nature of services marketing and its critical contribution to marketing success. Topics include customer expectations and perceptions in the design of service processes and standards. *Prerequisite: MKT 3361.*
- 3365 Integrated Marketing Communications (3)**
Course examines integrated marketing communications and how this enhances brand equity. Emphasis is placed on the decision sequence a manager would follow in planning, developing, and implementing a marketing communications program. *Prerequisite: MKT 3361.*
- 4461 Personal Selling (3)**
An applied course that introduces the economic, psychological, and social aspects of personal selling, direct selling techniques, and the sales process with emphasis on building customer relationships. *Prerequisite: MKT 3361.*
- 4462 Consumer Behavior (3)**
A study of the consumer as a decision maker. The course

- 4464 Marketing Research (3)**
Methods and procedures for collection, interpretation, and use of primary and secondary data in marketing including sampling, questionnaires, data collection, analysis, and preparation of reports. *Prerequisite: MKT 3361.*
- 4465 Business Logistics (3)**
A study of the procurement, warehousing, and transportation activities related to distribution system design, operation, and control. *Prerequisite MKT 3361.*
- 4466 Direct Marketing (3)**
Principles and techniques in planning, creating and producing consumer-direct communications to reach and deliver goods and services to customers. *Prerequisite: MKT 3361.*
- 4467 Sales Management (3)**
A study of the management of the personal selling functions. Emphasis is on the sales process including recruitment, training, organization, motivation and retention of sales force. *Prerequisite: MKT 3361.*
- 4468 International Marketing (3)**
Decision making and policy formulation relative to the cultural, social, political, legal and economic aspects of marketing in global environments. *Prerequisite: MKT 3361.*
- 4469 Marketing Management (3)**
This is the capstone course for marketing major students. Focus is on marketing management problem solving by applying marketing concepts, procedures and practices learned. Vehicles to deepen this decision-making approach will include text, cases and simulations. *Prerequisite: 15 SH in marketing courses beyond MKT 3361.*
- 4481 Internet Marketing I (3)**
Focuses on the opportunities and changes inherent in the Internet market. Includes a brief overview of the tools and technology that make it possible and how the Internet should and can impact marketing strategy. *Prerequisite: MKT 3361.*
- 4482 Internet Marketing II (3)**
A practicum cyber-incubator offered as an opportunity to manage a simulated business on the Internet. Skill development will focus on tools necessary to conduct business over the Internet. *Prerequisite: MKT 4481.*
- 4495 Selected Topics in Marketing (3)**
An in-depth study of a broad range of marketing topics. Individual investigations and reporting emphasized in seminar fashion. Focuses on a topic of a timely nature and/or special interest. *Prerequisite: MKT 3361.*

MATHEMATICS COURSES (MTH)

- 0096 Pre-Algebra (3)**

1125 Calculus I (4)

Topics include limits of functions, derivatives of algebraic, trigonometric, exponential and logarithmic functions and their inverses and the definite integral and its application to area problems. Applications of the derivative are covered in detail including approximations of error using differentials, maximum and minimum problems, and curve sketching using calculus. *Prerequisite: MTH 1115 or 1114, or advanced placement.*

1126 Calculus II (4)

Topics include vectors in the plane and in space, line and planes in space, applications of integration (such as volume, arc, length, work, and average value), techniques of integrations, indeterminate forms, infinite series, polar coordinates, and parametric equations. *Prerequisite: MTH 1125 or advanced placement.*

2201 Business Calculus (3)

An introduction to the basic ideas and techniques of differential and integral calculus, especially as they relate to problems involving maximum and minimum values of functions and marginal analysis. *Prerequisite: MTH 1112 or 1115 with a grade of C or better, or advanced placement. Note: Credit will not count toward a major or minor in mathematics.*

2210 Applied Statistics (3)

Applications of statistical techniques, such as experimental design, hypothesis testing, parametric and non-parametric tests along with descriptive statistics in con-

temporary research work, ski-6(mastics1 To.) Tu.8(a)-2.3(metric an2 05)v1746.7(E)4.3((a)5.6(n)1.8(e er. not co7.6(y2orar)7.2wÿwd

4424 Real Analysis I (3)

The real number system, completeness, limits, continuity, sequences, differentiation, and the Riemann integral. *Prerequisites: MTH 2227 and 3318.*

4425 Real Analysis II (3)

Sequences and series of functions, series, and a continuation of the integral to include the Fundamental Theorem of Calculus. *Prerequisite: MTH 4424.*

4426 Complex Analysis (3)

Complex numbers, elementary functions and their mappings, complex limits and power series, analytic functions, integrals, contour integral, and Cauchy integral formula. *Prerequisites: MTH 2227 and 3318 or permission of instructor.*

4436 Number Theory (3)

Divisibility, congruencies, prime numbers, Fermat's theorem, Diophantine equations, number theoretic functions. *Prerequisites: MTH 2227 and 3318.*

4441 Abstract Algebra I (3)

Properties of the integers, modular arithmetic. Elementary theory of groups, finite groups, subgroups, cyclic groups, permutation groups. Group isomorphisms and homomorphisms. *Prerequisites: MTH 2227, 3318, and 3331, or permission of instructor.*

4442 Abstract Algebra II (3)

Elementary theory of rings, polynomial rings, divisibility, unique factorization domains. Integral domains, ideals, factor rings, divisibility in inte4441 1 doma5.9(a)ns. 4.7(d)6.6(El5.9(e44.2(t)5.9(e tar)6.7()-5.3(,)TJT*.0002 Tc0.0019 Tw{p[heor)6.47y)-6.63(Cutaul dxaility

COURSE DESCRIPTIONS · 142

4407 Clinical Hematology Lab (2)

Special studies and training involving cell counts, hemoglobin and hematocrit determinations, and other special hematology procedures.

4408 Immunohematology (3)

This block involves blood banking, studies of the ABO blood group system, the Rh system, blood typing, antibody studies, and effects of transfusion.

4409 Immunohematology Lab (1)

3304b Leadership Lab (1)
 Leadership Lab is required for all Army ROTC students. The student will receive training in troop-leading procedures, mission planning, squad tactics, land navigation, individual movement techniques, water survival and rappelling.

4401 Leadership and Management (3)
 This course builds on the experience gained at the National Advanced Leadership Course in order to solve organizational and staff problems and discusses staff organization and functions, analysis of counseling responsibilities and methods, the principles of subordinate motivation and organizational change. Students will apply leadership and problem solving principles to a case study and or simulation. *Co-requisite: MS 4404a.*

4402 Officership (3)
 This course is designed to explore topics relevant to Second Lieutenants entering the U.S. Army and focuses on the legal aspects of decision making leadership, analyzing Army organization from the tactical to the strategic level, assessing administrative and logistical functions, performance of platoon leader actions, and an examination of leader responsibilities that foster an ethical command climate. *Co-requisite: MS 4404b.*

4404a Leadership Lab (1)
 Leadership lab is required for all Army ROTC students. The student will receive training in troop-leading procedures, mission planning, squad tactics, land navigation, individual movement techniques, water survival and rappelling.

4404b Leadership Lab (1)
 Leadership lab is required for all Army ROTC students. The student will receive training in troop-leading procedures, mission planning, squad tactics, land navigation, individual movement techniques, water survival and rappelling.

1103 Music Theory II (3-3)
 Study of modulation, secondary dominants, seventh chord resolution, two- and three-part forms, and intermediate-level analysis. *Prerequisite: MUS 1102. Co-requisites for music majors: MUS 1106 and 1108.*

1105 Class Piano I (1-2)
 Introduction to basic keyboard musicianship and music reading skills. Includes simple improvisation, harmonization and beginning chorale playing.

1106 Class Piano II (1-2)
 Development of intermediate-level keyboard skills, chorale playing, sight reading and transposition. *Prerequisite: MUS 1105.*

1107 Aural Skills I (1-2)
 Beginning sightsinging and rhythmic reading. Melodic, harmonic and rhythmic dictation, including intervals, chord qualities and simple/compound meters. Basic keyboard skills required.

1108 Aural Skills II (1-2)
 Intermediate level sight singing and rhythmic reading. Combined melodic and harmonic dictation, with inversions and mixed meter rhythms. Intermediate keyboard skills required. *Prerequisite: MUS 1107.*

1110-4427 Private Instruction (1 credit hour per semester, 1 lesson per week)

1110	Violin
1111	Viola
1112	Cello
1113	String Bass
1114/2214/3314/4414	Piano
1115/2215/3315/4415	Organ
1116/2216/3316/4416	Voice
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MUSIC COURSES (MUS)

NOTE: A passing score on the theory placement test prior to registration is required of all students taking music theory coursework (except for MUS 1100 - Basic Music Skills). Contact the School of Music for more information.

1100 Basic Music Skills (2-3)
 Elements of music with emphasis on mastering the basic skills of musicianship. Music reading, orientation to the keyboard, sight-singing and dictation will be included. *NOTE: This course cannot be used in meeting degree requirements other than general electives. May not be taken concurrently with any other theory course.*

1102 Music Theory I (3-3)
 Study of fundamental characteristics of tonal music, including figured bass, transposition, four-part voice leading and basic analysis. *Prerequisite: Grade of C in MUS 1100 or acceptable score on placement test. Students must take placement test before enrolling in this sequence. Co-requisites for music majors: MUS 1105 and 1107.*

- 1131 Music Appreciation (2-2)**
Orientation, vocal and instrumental media, forms, historical development and guided listening. Credit for this course does not apply toward any program in music.
- 1132 Honors Music Appreciation (2-2)**
Elements of music, composers, vocabulary for music, forms and music literature. Includes a writing project on a musical topic. *Prerequisite: ACT score of 25 or permission of instructor.*
- 1181 Band (1-6) Fall; (1-3) Spring and Summer**
Marching Band (Fall) and concert band (Spring and Summer). Open to all students by permission of director.
- 1182 Choir (1-3)**
Choral ensemble; open to all students by permission of director.
- 1183 Collegiate Singers (1-3)**
Select choral group devoted to performance of choral masterworks. *Prerequisite: Permission of director.*
- 1191 Musical Theatre (1-3)**
Production of fully-staged works for musical theatre. Offers experiences on-stage, back-stage, and in the orchestra pit. Open to all students by permission of director.
- 1192 Madrigal Singers (1-3)**
Performance of choral chamber music in a variety of styles, including Renaissance, 20th Century, jazz and pop. *Prerequisite: Audition with director.*
- 2202 Music Theory III (3-3)**
Principles of 16th century counterpoint and analysis of through-composed forms. *Prerequisite: MUS 1103. Corequisite for music majors: MUS 2207.*
- 2203 Music Theory IV (3-3)**
Compositional techniques and analysis of later romantic period works. Introduction to 20th century composition and analysis. *Prerequisite: MUS 2202.*
- 2207 Aural Skills III (1-2)**
Advanced sight singing and rhythmic reading. Contrapuntal dictation and transcription projects. Intermediate keyboard skills required. *Prerequisite: MUS 1108.*
- 2230 Survey of Music Industry**
An introduction to practices and inter-relationships of the music industry, such as retail, recording, distribution, legal aspects, publishing media and employment.
- 3300 History of Jazz (2-2)**
History of jazz and pop styles from 1900 to the present. Analysis of harmonic principles and common practices of each major period.
- 3301 Music History I (2-2)**
Evolution of music, stylistic characteristics of major movements and their relationship to literary, artistic and social trends. This course includes the pre-Christian, Romanesque, Gothic and Renaissance periods. *Prerequisite: MUS 1103.*
- 3302 Music History II (2-2)**
Includes composers, music literature, style characteristics and societal influences of the Baroque, Classic, Romantic and Post-Romantic periods. *Prerequisite: MUS 1103.*
- 3303 Music History III (2-2)**
Composers and musical works from Impressionism through the late 20th century, and the non-musical events which influenced them. Covers the wide diversity of mid-20th century styles, including Expressionism, Pandiatonicism, Atonality, Neo-Classicism, Serialism, Neo-Romanticism and others. *Prerequisite: MUS 1103.*
- 3305 Music Technologies (3-3)**
Study of the applications of the microcomputer to music teaching and to the management, planning, and record-keeping tasks of the music educator.
- 3306 Conducting (3-3)**
Basic conducting techniques for instrumental and choral groups. Includes score study, rehearsal techniques and interpretation of various styles. *Prerequisite: MUS 1103.*
- 3346 Educational Assessment in Fine Arts (3-3)**
This course provides a broad foundation in all aspects of assessment as it is applied to the P-12 music and art classroom, from learning theory to practical application of assessment techniques, data management, critical thinking, progress reporting and portfolio building. Assessment task design in the artistic response modes is covered, and a series of assessments that can be implemented in the music/art classroom are developed. *Prerequisite: Admission to TEP.*
- 3351 Class Brass (1-2)**
Group instruction in techniques of playing and teaching brass instruments.
- 3352 Class Woodwinds (1-2)**
Introduction to each of the principal woodwind instruments, emphasizing teaching techniques suitable for band classes.
- 3353 Class Percussion (1-2)**
Group instruction in playing and teaching the principal pitched and non-pitched percussion instruments.
- 3354 Class Strings (1-2)**
Group instruction in techniques of playing and teaching stringed instruments.
- 3356 Class Voice (1-2)**
Introduction to the use of the singing voice for non-voice principals in music education.
- 3358 Beginning Folk Guitar (1-2)**
Basic introduction to guitar chording and accompanying songs in the classroom or in informal settings.

3361 Integrating Music into the Curriculum (3-3)

Basic skills and methods of presentation and evaluation for music in grades P-6. Role-playing experiences are used to demonstrate appropriate materials, student involvement and motivational techniques. *Prerequisite: MUS 1131 or 1132.*

3364 String Orchestra (1-2)

String ensemble open to all students with permission of director.

3365 Class Composition (1-3)

Creative musical writing, criticism, and study of compositional techniques.

MUSIC INDUSTRY COURSES (MUI)

- 3310 Audio Principles and Techniques (3)**
A basic course to develop the understanding and skills to make audio recordings. Listening skills will be emphasized along with editing and recording assignments.
- 3315 Song Writing (2)**
Study of basic skills and techniques of songwriting including melodic construction, harmonic progression, and lyric writing and revisions.
- 3320 Grant Writing/Funding for the Musical Arts (2)**
Identifying funding sources and creating effective grant proposals for music production and related activities.
- 3325 Recording Studio I (2)**
An examination of the art of studio recording. The mixing console, microphones, sound effects, and digital and analog recording devices will be studied.

Mastery of the use of different systems of measurement will be a priority. Includes an exam on computation of dosages and solutions, requiring completion with 85% accuracy. *Prerequisites: ENG 1101, MTH 1112, PSY 2200, BIO 3347, L347.*

2202 Pharmacology (2-2)

Focuses on the general classification of drugs, pharmacological actions, clinical usage, methods of administration, usual dosage, side effects, contraindications, toxic reactions, and related nursing implications. *Prerequisites: NSG 1140, NSG 1141 or 1110, and BIO 3372, L372.*

2213 Nutrition (2-2)

COURSE DESCRIPTIONS · 148

bites, burns, and drownings. May audit for recertification. Open to all majors.

- 1160 Introduction to Technology in Nursing Education (1)**
Provides a foundation for using computer technology in learning; addresses digital communication, resources and research. General topics include communication through electronic mail and course discussion using the World Wide Web as an information tool, online scholarly re-

- man responses to health promotion needs and common health alterations across the life span. *Prerequisite: Admission to BSN Program. Co-requisite: NSG 3314.*
- 3314 Nursing Concepts I Practicum (3-6)**
Provides clinical learning opportunities for students to incorporate biological, psychological, and sociological dimensions into the care of individuals who require assistance in meeting basic health needs and into the diagnosing and treatment of human responses to common health alterations across the life span. Focuses on human-environment interaction and emphasizes the use of the nursing process as a systematic approach to health promotion and the provision of illness and restorative care. *Prerequisite: Admission to BSN Program. Co-requisite: NSG 3313.*
- 3315 Pathophysiology (3)**
Explores the relationship between normal and altered physiology in human systems. Examines physiologic adaptive processes to internal and external environmental stressors. Emphasizes pathophysiologic manifestations of altered states of health. *Prerequisites: BIO 3347, L347, 3348, and L348. Open to all majors.*
- 3323 Maternal-Infant Health Nursing (3)**
Provides a knowledge base for care of childbearing families. Examines the childbearing family as a part of the human environment interactive system. Emphasizes the nurse's role in facilitating adaptive responses of the childbearing family during the antepartal, intrapartal and postpartal periods. *Prerequisites: Successful completion of all nursing courses in semesters I and II of BSN clinical nursing sequence. Co-requisite: NSG 3324.*
- 3324 Maternal-Infant Health Nursing Practicum (2-4)**
Provides clinical learning opportunities for students to provide nursing care for childbearing families. Emphasizes use of the nursing process as systematic approach to facilitate adaptive responses of the childbearing family during the antepartal, intrapartal and postpartal periods. *Prerequisites: Successful completion of all nursing courses in semesters I and II of BSN clinical nursing sequence. Co-requisite: NSG 3323.*
- 3325 Nursing Concepts II (3)**
Explores the relationship between life span development and adaptive responses in the human-environment interactive system. Continues to explore the concept of illness as an altered health state. Emphasizes the nurse's role in diagnosing and treating human responses (biological, psychological, and sociocultural) to common health alterations across the life span. *Prerequisites: Successful completion of all nursing courses in Semester I of BSN clinical nursing sequence. Co-requisite: NSG 3326.*
- 3326 Nursing Concepts II Practicum (3-6)**
Provides clinical learning opportunities for student to diagnose and treat human responses (biological, psychological, and socio-cultural) to common health alterations across the life span. Emphasizes the use of nursing process as a systematic approach to providing illness and restorative care. *Prerequisites: Successful completion of all nursing courses in Semester I of BSN clinical nursing sequence. Co-requisite: NSG 3325.*
- 3332 Child Health Nursing (3)**
Provides theoretical foundation for the nursing care of children. Examines the relationship between growth and development and the adaptive responses of children within the human-environment interactive system. Emphasizes the nurse's role in health promotion and maintenance, illness and restorative care for children of various ages. *Prerequisites: Successful completion of all nursing courses in semesters I and II of BSN clinical nursing sequence. Co-requisite: NSG 3333.*
- 3333 Child Health Nursing Practicum (2-4)**
Provides clinical learning opportunities for students to provide illness and restorative care for children experiencing alterations in health states. Emphasizes use of the nursing process in facilitating human adaptive responses to child health alterations. *Prerequisites: Successful completion of all nursing courses in semesters I and II of BSN clinical nursing sequence. Co-requisite: NSG 3332.*
- 3334 Psychiatric-Mental Health Nursing (3)**
Explores mental illness as an altered response to internal and external environmental dimensions. Examines selected theories of mental health and illness for use in nursing practice. Emphasizes the nursing process as a systematic approach to facilitating human adaptive responses to mental health alterations across the life span. *Prerequisites: Successful completion of all nursing courses in Semester I of BSN clinical nursing sequence. Co-requisite: NSG 3335.*
- 3335 Psychiatric-Mental Health Nursing Practicum (2-4)**
Provides clinical learning opportunities for students to provide illness and restorative care for individuals experiencing alterations in mental health states. Emphasizes use of the nursing process in facilitating human adaptive responses to mental health alterations. *Prerequisites: Successful completion of all nursing courses in Semester I of BSN clinical nursing sequence. Co-requisite: NSG 3334.*
- 3336 Adult Health Nursing (3)**
Continues to explore the relationship between life span development and adaptive responses in the human environment interactive system. Continues to explore the concept of illness as an altered health state for the adult. Emphasizes the nurse's role in diagnosing and treating human responses (biological, psychological, and socio-cultural) to common health alterations across the lifespan. *Prerequisite: Successful completion of all nursing courses in semesters I and II of the BSN clinical nursing sequence. Co-requisite: NSG 3337.*
- 3337 Adult Health Nursing Practicum (2-4)**
Provides clinical learning opportunities for student to diagnose and treat human responses (biological, psychological and socio-cultural) to common health alterations across the life span. Emphasizes the use of the nursing process as a systematic approach to providing illness and restorative care. *Prerequisite: Successful completion of all nursing courses in semesters I and II of the BSN clinical nursing sequence. Co-requisite: NSG 3336.*
- 3340 Ethics in Nursing (3)**
A discussion of traditional ethical theories, principles and meta-ethical concerns will provide the necessary background required to explore a variety of controversial is-

POLITICAL SCIENCE COURSES (POL)

- 2200 World Politics (3)**
An investigation of the development, nature, and process of political actions across national boundaries in the global system. Topics include international security, comparative government, inte

- 4424 Contemporary American Foreign Policy (3)**
This course examines the foreign policy processes of the United States: historical traditions, political institutions, economic and military capabilities, the Congress, the Presidency, interest groups, the media, and public opinion.
- 4432 Comparative Public Policy (3)**
This course examines the process of policy making in a cross-comparative framework that illustrates how different nation states, both in the developed and the developing worlds, formulate and implement public policy.
- 4433 Comparative Government (3)**
A comparative analysis of state governments in the world with an emphasis upon political cultures, governmental institutions and political processes that lead to differences and international tensions.
- 4440 Political Sociology (3)**
An examination of the inter-relationship of social forces and politics, with an emphasis on institutions, political movements, sources and distribution of power, and public policy.
- 4445 Inter-American Relations (3)**
This course examines the relationship between the United States and the remainder of the Western Hemisphere, with an emphasis on historical and contemporary Latin American relations.
- 4450 Latin American Politics (3)**
An introduction to the social and political institutions of Latin America
- 4451 Public Personnel Administration (3)**
A survey of the basic principles and functions of personnel administration in the public service and of the current strategies for managing recruitment, placement, salary and benefit strategies, training, retirement, and other personnel functions.
- 4452 International Law (3)**
This course examines the sources and development of international law from a historical, political, jurisprudential, and philosophical standpoint. It will include a comprehensive investigation of state sovereignty, jurisdiction, the role of the United Nations, the regulation of the use of force in world affairs, and international human rights law.
- 4453 Bureaucratic Politics (3)**
A study of the theories of organizations and their structures as they effect the policymaking environment, examining goals, resources, effectiveness, equilibrium, and change relating to organizations and their relationship to administration.
- 4460 Intercultural Relations (3)**
An analysis of the influence of culture on interstate relations including theories, concepts, and applications.
- 4465 Politics of the Developing World (3)**
This course examines the political and economic challenges faced by developing states. Theories and models of development will be analyzed in a variety of ways.
- 4466 Middle Eastern Politics (3)**
An introduction to the social and political institutions of the contemporary Middle East
- 4470 European Politics (3)**
An introduction to the social and political institutions of contemporary Europe.
- 4471 Intergovernmental Relations (3)**
The administrative, fiscal, and legal factors that govern relations between the various government entities in the United States. The focus is on the political conflicts that occur and the strategies for resolution.
- 4472 Administrative Law (3)**
This course examines the legal environment in which government agencies function, including the powers and procedures that control administrative discretion, rule-making, investigations, prosecuting, negotiating, and settling; constitutional law, statutory law, common law, and agency-made law; the liability of governments and their officers; and selected court cases and decisions.
- 4474 Terrorism and Political Violence (3)**
This course is designed to introduce students to the origins and significance of contemporary political violence with an emphasis on the phenomenon of terrorism. It employs an interdisciplinary, case-study approach.
- 4476 Politics of Southeast Asia (3)**
This course involves the study of politics in the Philippines, Indonesia, Vietnam, Laos, Kampuchea, Malaysia, Singapore, Brunei, Myanmar, and Thailand. It investigates the historical and cultural factors contributing to their political relationships within the region and internationally
- 4490 Internship in Political Science (1-3)**
Supervised work in an agency that can provide practical experience in the field of study. *Prerequisites: senior standing and approval of supervising instructor and the department chair.*
- 4491-- 4492 Guided Independent Research (1-3 credit hours each)**
Additional information is indexed under Guided Independent Research and Study.
- 4493 – 4494 Guided Independent Study (1-3 credit hours each)**
Additional information is indexed under Guided Independent Research and Study.
- 4495 Selected Topics in Political Science (3)**
Examines selected topics of a timely nature and/or special interest within the field of political science.

PSYCHOLOGY COURSES (PSY)

2200 General Psychology (3)
A survey of the basic theories, concepts, principles, and research findings in the field of psychology.

2201 Honors General Psychology (3)
A survey of the basic theories, concepts, principles, and research findings in the field of psychology.

2205 Psychology of Adjustment (3)
A course in mental health, designed to assist the individual in making a good adjustment to the changing requirements of the environment.

2210 Developmental Psychology (3)
A study of human development across the life-span with emphasis on psychosocial, physical, emotional, and cognitive changes.

2230 Orientation to Psychology (3)
Introduction to the language of psychology, APA writing style, and library research. Also includes an over view of career paths in psychology.

3301 Basic Statistics (3)
An introduction to descriptive and inferential statistical concepts, methods, and tools. Topics to be covered include: descriptive statistics, probability, normal distribution, sampling distributions, confidence intervals, hypothesis testing, and regression analysis.

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- 3360 Forensic Psychology (3)**
Forensic psychology is the application of the science and profession of psychology to questions and issues relating to law and the legal system. This course will introduce students to the specialty area of forensic psychology. Particular emphasis will be on applied aspects of the field. *Prerequisite: Six semester hours of psychology.*
- 3365 Human Factors Psychology (3)**
Analysis of theoretical issues and research methods related to the interaction between people and machines and human performance. Topics include information processing theory, human control systems and displays, task simulation, perceptual and motor factors limiting human performance. *Prerequisite: Six semester hours of psychology.*
- 3370 Comparative Psychology (3)**
This course examines the development, causal mechanisms, evolutionary history, and function of the behavior of animals, including humans.
- 3380 Social Psychology (3)**
A theoretical and empirical analysis of social behavior, including selected topics related to social perception, social influence, social interaction, and applied social psychology.
- 3385 Evolutionary Psychology (3)**
An examination of human behavior and cognition from an evolutionary perspective.
- 3390 Special Topics in Psychology (3)**
An examination of selected topics or issues in psychology. May be repeated for credit when the course content varies. *Prerequisite: Six semester hours of psychology.*
- 4400 Advanced General Psychology (3)**
A comprehensive study of the discipline of psychology designed to expand the student's depth and breadth of knowledge in psychology. *Prerequisite: 15 semester hours of psychology.*
- 4401 Psychological Tests and Measurements (3)**
Selection, evaluation, administration, scoring, interpretation and uses of tests of intelligence, proficiency, interests, personality, aptitude and social adjustment. *Prerequisite: PSY 3301, additional three semester hours of psychology.*
- 4402 Principles of Counseling (3)**
Overview of major counseling theories and techniques, interviewing, assessment, professional issues and ethics, and a review of research and practical problems. *Prerequisite: Six semester hours of psychology.*
- 4405 Experimental Psychology (3)**
Various techniques for conducting scientific research in psychology will be discussed. Course objectives include designing and conducting an experiment as well as analyzing and reporting the results. *Prerequisite: PSY 3301, additional three semester hours of psychology.*
- 4410 Business and Industrial Psychology (3)**
Application of psychology in business and industry, including employee selection, performance appraisal, motivation, organizational psychol
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- 3301 Children and Family Services (3)**
Child welfare services from both the public and private sectors of social work practice will be assessed, emphasizing the availability and effectiveness of services for children and their families in the United States. The historical development of the child welfare movement will be examined.
- 3302 Social Service Resources (3)**
Examination of social welfare services and institutions, public and private, to include historical development, philosophical basis, structure, and function.
- 3303 Crisis Intervention (3)**
Case management techniques for dealing with crisis. Crisis theory, stress management, and time-limited intervention will be examined.
- 3304 Social Work Practice In Health Settings (3)**
A survey of the use of professional social work in a variety of health care delivery settings. Exposure to basic medical terminology needed by social workers. Overview of the social aspects of disease, illness, and disability.
- 3320 Human Behavior In the Social Environment II (3)**
An examination of the social dynamics of discrimination and oppression and particularly how discriminatory and oppressive environments have potential for negatively affecting biopsychosocial growth and development.
- 3340 Social Policy and Planning (3)**
Exploration of the social policy formulation process and the building of analysis skills in the evaluation of social policy and programs. The impact of political, economic, and social forces is a focal point and the process of incrementalism in implementation is examined. *Prerequisites: HS 2230 or permission of instructor.*
- 3390 Social Work with Individuals and Families (3)**
The melding of the systems and developmental perspectives and the problem-solving approach as a basis for generalist social work practice with individual and family systems. Assessment, intervention, and evaluation skills are developed. *Prerequisite: Admission to the professional social work curriculum.*
- 4450 Senior Seminar (2)**
The impact of recent changes in federal and state legislation and the role and function of professional organizations and their positions on current issues. *Prerequisite: HS/SWK major with senior standing or permission of instructor.*
- 4471 Social Work with Groups (3)**
The student learns to identify group processes and use these in assessment and intervention with the group as a client system. Evaluation of practice is extended to group settings. *Prerequisite: SWK 3390. Co-requisite: SWK 4472.*
- 4472 Social Work with Organizations and Communities (3)**
Assessment and intervention with the community or organization as a client system. Skill building in evaluation
- of one's own practice continues. *Prerequisite: SWK 3390. Co-requisite: SWK 4471.*
- 4480 Social Work Pre-Practicum (1)**
Preparation for SWK 4481. *Co-requisite: SWK 4471 and SWK 4472.*
- 4481 Social Work Practicum (12)**
Placement in a social service agency which provides the opportunity to practice and develop beginning professional social work skills under the joint supervision of a

COURSE DESCRIPTIONS · 162

- 3320 Work, Family, and Changing Sex Roles (3)**
Focuses on the overlapping worlds of work and family,

- 4433 The Community (3)**
A comparative view of the social organization of communities having widely different economic, spatial and cultural bases, analyzing the structure and interrelationship between the community and other social institutions and organizations. *Prerequisite: Twelve hours of social science.*
- 4435 The Sociology of Complex Societies (3)**
A history and analysis of complex organizations from early to modern times.
- 4436 Social Evolution: Anarchy to Democracy (3)**
Social analysis of human history from bands to modern societies. *Prerequisite: Fifteen hours of social science.*
- 4440 Sociology and the Internet (3)**
Provides an overview of using the Internet for social science research and practice. *Prerequisites: Nine hours of social science.*
- 4441 The Sociology of Logic and Emotion (3)**
A study of the links between logic and emotions. *Prerequisite: Nine hours of social science.*
- 4456 Gerontology (3)**
A survey of the aged in America, with emphasis on the psychosocial aspects of aging.
- 4459 Medical Sociology (3)**
The sociological perspective applied to medicine. Topics include changing ideas of disease causation, the role of practitioners and patients, the institutional setting, differential delivery of health services, differential patterns of morbidity and mortality, and the politics of health.
- 4490 Internship in Sociology (3)**
Applications of skills and knowledge of sociology in government agency, foundation, public service institution or similar situation under the supervision of a faculty member. *Prerequisite: Approval of the student's academic adviser and department chair.*
- 4491-4492 Guided Independent Research (1 to 3 credit hours per course per semester)**
Undergraduate research with attention to critical evaluation of research techniques, methods and procedures. *Prerequisites: Junior or senior standing with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written request is to be submitted to the department chair at least two weeks in advance of the term in which the study is to be undertaken. May not be used to repeat a course for which a grade of D or below has been earned. Application forms are available in the office of University Records. Guided independent research may be taken only in the applicant's major or minor field.*
- 4493-4494 Guided Independent Study (1 to 3 credit hours per course per semester)**
Supervised study through field and laboratory projects, guided readings, creative endeavors or achievement of specific skills. *Prerequisites: Junior or senior standing, with a minimum overall GPA of 3.0, permission of guiding professor, approval of department chair or dean. A written request is to be submitted to the de-*

on-site visit to an Hispanic environment. *Prerequisite:*
Permission of the instructor.

4447 Readings in Hispanic Literature (3)

In-depth study of the works of a selected major author, period or genre in the literature of Spain or Spanish America. *Prerequisite:* SPN 2242 or equivalent. May be repeated for credit.

4450 Hispanic Culture and Civilization (3)

A survey of the geography, history, cultural achievements, institutions and daily life of Spain and other Hispanic countries. *Prerequisite:* SPN 2242.

4491-4492 Guided Independent Research (1-3 credit hours per course per semester)

Additional information is indexed under Guided Independent Research and Study.

4493-4494 Guided Independent Study (1-3 credit hours per course per semester)

Additional information is indexed under Guided Independent Research and Study.

**SPECIAL EDUCATION COURSES (SPE)
(COLLABORATIVE TEACHER)**

3302 Introduction to Moderate/Severe Disabilities (3)

This course presents an overview of the social, emotional, physical, and learning characteristics of children and youth with moderate and severe disabilities. Emphasis is placed on information regarding the definition, prevalence, and etiology of moderate and severe disabilities as well as information pertaining to the classification, assessment, placement, instruction, and programming needs and services for individuals with moderate and severe disabilities. *Prerequisite:* Admission to TEP.

3306 Teaching Students with Mild Disabilities (3)

This course will focus on 17(idex)6.9(ie)3.9(m)5.9(ent, pla)eaching SoaPrw TD1(o622 Tw5.9ra)TD0.0005 Tc0.0028 Tw8This cour5e will -1s.

4454 Internship Seminar in Collaborative Teacher K-6 (3)

This course provides seniors an opportunity during internship to examine broad educational issues and concerns, topics on the state and local levels and those of personal interest. The scope of the course ranges from juvenile law, classroom management, and professionalism to professional development for teachers and other course topics. *Prerequisite: Admission to TEP. Co-requisite: SPE*

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4431 Interpersonal Communication (3-3)

Study of theories of communication behavior in relatively unstructured face-to-face situations, including small-group discussion. *Prerequisite: SPH 2241 or permission of the instructor.*

4441 Oral Interpretation (2-2)

Study and application of the principles and practices or oral interpretation (reading) of literature, including individual and ensemble performance. *Prerequisite: SPH 2241 or permission of the instructor.*

4442 Rhetoric (3-3)

Study of the historical development of rhetorical theory