
COURSE DESCRIPTIONS

ACCOUNTING			ADULT EDUCATION		
ACT	6691	<p>Managerial Accounting (3) A study of sources and classifications of accounting data, classification and behavior of revenues and costs, use of accounting data for profit planning and cost control, and use of accounting data for special analysis. <i>Prerequisite: MBA 5502 or equivalent.</i></p>	ADE	5560	<p>Instructional Systems Development (3) This course emphasizes systematically developed course design. Special attention is given to learning and instructional systems theory.</p>
ACT	6692	<p>Advanced Accounting Problems (3) A consideration of problems relating to pension plans, long-term leasing arrangements, refunding of bonds payable, stock options, allocation of income taxes, changing price levels, cash flow statements, and other financial accounting topics with emphasis on relevant pronouncements by professional organizations and governmental agencies.</p>	ADE	6600	<p>Foundations of Adult Education (3) An overview of adult education to give an understanding of characteristics of adults as learners as well as the history, philosophy, and nature of adult education. Includes exposure to fundamental adult education concepts such as lifelong learning, self-directed learning, and contract learning.</p>
ACT	6694	<p>Income Tax Research (3) An advanced study of selected topics in the Internal Revenue Code and Regulations with the emphasis on tax research. The course covers individual, partnership, corporations as well as estate and gift taxes.</p>	ADE	6605	<p>Computer Based Instructional Technologies (3) This graduate level advanced survey course is designed to prepare students to use classroom adaptable technologies. Emphasis is given to historical and social context, computer systems, software, hardware, and curriculum adaptation.</p>
ACT	6695	<p>Accounting Research and Communication (3) An individual study of specific accounting topics and written and oral communication of the results of the study.</p>	ADE	6606	<p>Current and Emerging Instructional Technologies (3) This course focuses on current and emerging instructional technologies. The emphasis of this class is on the instructional use of production software, desktop publishing, graphics, hypermedia, on-line services, optical technology, and telecommunications. <i>Prerequisite: ADE 6605 or permission of instructor.</i></p>
ACT	6696	<p>Accounting Information Systems (3) An advanced study of accounting information systems concepts and applications. Case studies will provide the students an opportunity to relate systems concepts to the actual problems encountered in the analysis, design, implementation, and utilization of computer-based information systems.</p>	ADE	6608	<p>Curriculum Integration of Technology (3) The purpose of this course is to prepare students to apply knowledge and competency in instructional technologies in relation to curriculum design, diverse models, and teaching situations at all developmental levels. Included is evaluation of software, audio/visual production, and instructional design using technology as a basis for instruction.</p>
ACT	6698	<p>Advanced Auditing (3) An examination of the AICPA's professional standards and techniques of reviewing and appraising the various functions of an organization with the objective of reporting on the opportunities for improvement and the deficiencies disclosed. Emphasis on the effectiveness of internal control structure and operating procedures.</p>	ADE	6617	<p>Seminar in Personnel Planning and Leadership (3) A study of literature and research pertinent to adult education in areas of planning and leadership.</p>
ACT	6699	<p>Contemporary Issues in Accounting (3) A study of the recent growth of accounting theory, as influenced by regulatory agencies, economic conditions, and professional accounting organizations.</p>			

- ADE 6620 Seminar in Communication and Human Relations (3)**
An investigation of literature and research related to verbal and nonverbal communication, listening, and human relations appropriate to adult education.
- ADE 6630 Programs for Adult Education (3)**
A study of current concepts and objectives of adult education programs, courses and activities. Includes study of adult education programs and agencies serving diverse adult learners.
- ADE 6653 Educational Evaluation (3)**
The course presents basic procedures used in evaluation. A major focus is on planning and constructing teacher-made tests and non-test evaluation techniques. Also includes study of a variety of standardized tests.
- ADE 6670 Psychological Foundations of the Adult Learner (3)**
An in-depth study of research findings and philosophical concepts related to the nature of adult learners and learning process; principles of motivation and effective instructional design geared toward adult learners; and social and cultural influences on adult learning. Emphasis will be given to the understanding of critical and variable attributes of adult learners.
- ADE 6674 Methods and Strategies for Teaching Adults (3)**
A study of methods and formats used in organizing educational materials for adult learners. Emphasis is given to designing effective instruction which matches methods and strategies to educational demands.
- ADE 6680 Curriculum Development for Adult Education (3)**
A study of concepts, learning theories, materials, and media related to curriculum and program development in adult education.
- ADE 6691 Research Methodology (3)**
The study and evaluation of research methods commonly used in the social sciences. The course will provide information necessary to understand and apply research processes, synthesize knowledge and writing, and plan and organize research problems for interpretation and application of research results. Application of these skills in the form of a written project using the Publication Manual of the American Psychological Association (APA) is required. (A grade of "B" or better is required)
- ADE 6694 Special Problems in Adult Education (1-3)**
A study of problem or problems using research techniques. Selection of problem to be approved by student's adviser and in-

structor under whom study is to be made. Study should contribute to student's program. Preparation of scholarly paper or project required and may involve oral defense.

- ADE 6696, 6697, 6698 Practicum in Adult Education (1-3)**
Supervised experiences related to instruction in area of specialization. Emphasis on application of skills, concepts, and principles acquired in previous courses. *Prerequisite: Completion of coursework and approval of adviser are required.*

ART

- ART 5581 Methods and Materials in Art (3)**
Teaching methods, selection, organization, and use of art materials.
- ART 5599 Advanced Studio Projects (3)**
Supervised study and projects in an area not included in the student's undergraduate studies.
- ART 6605 Seminar in Art History (3)**
Historical inquiry into art with emphasis on sources and approaches to the visual arts as they interact with other facets of culture.
- ART 6625, 6626, 6627 Specialized Study in Area of Art. (1-3)**
An individualized study with studio art faculty. Total credit for any combination of enrollments in these courses may not exceed six semester hours. See semester hour limits listed under Course Restrictions in General Regulations section.
- ART 6662 Seminar in Art Education (3)**
A review of issues and research in art education and the visual arts.
- ART 6664 Research in Art Education (3)**
A review of contemporary research in art education and the presentation of a scholarly paper. *Prerequisite: ART 6662*

BIOLOGY

- BIO 5502 Spring Flora (4)**
A 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: general biology, general ecology*
- BIO 5505 Entomology (3)**
A study of the orders of insects with the emphasis on morphology, taxonomy, and

life cycles. *Prerequisites:* general biology.
Corequisite: BIO L505

genetics, general chemistry, statistics.
Corequisite: BIO L521

- BIO L505 Entomology Lab (1)**
A study of morphology, classification, and identification of insects. A collection is required. *Corequisite:* BIO 5505
- BIO 5510 Animal Behavior (3)**
A study of the classical and current concepts of animal behavior including individual and social behavioral patterns. *Prerequisite:* genetics. *Corequisite:* BIO L510
- BIO L510 Animal Behavior Lab (1)**
Experimental and observational techniques in behavior. *Corequisite:* BIO 5510
- BIO 5513 Limnology (3)**
A study of the physical, chemical, geological, and biological aspects of freshwater ecosystems as influenced by activities in surrounding watersheds. *Prerequisites:* general biology, general ecology, general chemistry. *Corequisite:* BIO L513
- BIO L513 Limnology Lab (1)**
Field and laboratory exercises in lake and stream science, including instrumentation, measurement, sampling, and analysis. *Corequisite:* BIO 5513
- BIO 5516 Microbial Ecology (3)**
A study of 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. *Prerequisites:* microbiology, organic chemistry. *Corequisite:* BIO L516
- BIO L516 Microbial Ecology Lab (1)**
Microbial ecology laboratory techniques including isolation, identification, and enumeration of microorganisms from aquatic and terrestrial environments. *Corequisite:* BIO 5516
- BIO 5520 Field Vertebrate Zoology (4)**
A study of the basics of vertebrate identification, with emphasis on phylogeny, anatomy, morphology, life histories, habitats, distributions, and conservation. *Prerequisites:* general biology, general chemistry
- BIO 5521 Population Ecology (3)**
This course covers animal and plant populations, food supply, competition, disease, fecundity, distribution, and other environmental factors. Management of endangered species and protected ecosystems are included. *Prerequisites:* general ecology,

- BIO L521 Population Ecology Lab (1)**
Field exercises in identifying ecological problems, formulating and testing hypotheses, and evaluating data using standard statistical methods. *Corequisite:* BIO 5521
- BIO 5525 Field Botany (4)**
A 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:* general biology, general ecology. See semester hour limits listed under Course Restrictions in General Regulations section.
- BIO 5530 Applied Genetics (3)**
Advanced studies in genetics with emphasis on cytogenetics and molecular genetics. *Prerequisites:* genetics, organic chemistry. *Corequisite:* BIO L530
- BIO L530 Applied Genetics Lab (1)**
An introduction to procedures and equipment used in the study of cytogenetics and molecular genetics. *Corequisite:* BIO 5530
- BIO 5532 Comparative Vertebrate Anatomy (3)**
A detailed study of vertebrate organ-systems with emphasis on structural and functional morphology and evolutionary relationships. *Prerequisites:* Any 3000-level BIO lecture and lab. *Corequisite:* BIO L532
- BIO L532 Comparative Vertebrate Anatomy Lab (1)**
A detailed study of the shark, mudpuppy, and cat with emphasis on structural and functional morphology. *Prerequisites:* Any 3000-level BIO lecture and lab. *Corequisite:* BIO 5532
- BIO 5533 Embryology (3)**
A study of embryonic development of vertebrates. This course links cellular and molecular mechanisms to morphogenesis. *Prerequisites:* genetics, cell biology, organic chemistry. *Corequisite:* BIO L533
- BIO L533 Embryology Lab (1)**
A study of embryonic development of vertebrates as illustrated by the frog, chick, and pig. Lab includes experimental investigations of developing systems. *Corequisite:* BIO 5533
- BIO 5545 Ichthyology (3)**
This course covers the morphology, anatomy, physiology, taxonomy, life histories, distribution, and adaptations of fishes. *Pre-*

- requisites: general biology, general ecology. Corequisite: BIO L545*
- BIO L545 Ichthyology Lab (1)**
A study of the structural features, identification, and classification of freshwater and marine fishes. *Corequisite: BIO 5545*
- BIO 5546 Herpetology (3)**
A study of the morphology, anatomy, physiology, taxonomy, life histories, distribution, and adaptations of amphibians and reptiles. *Prerequisites: general biology, general ecology. Corequisite: BIO L546*
- BIO L546 Herpetology Lab (1)**
A study of the structural features, identification, and classification of amphibians and reptiles. *Corequisite: BIO 5546*
- BIO 5547 Ornithology (3)**
A study of the morphology, anatomy, physiology, taxonomy, life histories, distribution, and adaptations of birds. *Prerequisites: general biology, general ecology. Corequisite: BIO L547*
- BIO L547 Ornithology Lab (1)**
A study of the structural features, identification, and classification of birds. *Corequisite: BIO 5547*
- BIO 5548 Mammalogy (3)**
A study of the morphology, anatomy, physiology, taxonomy, life histories, distribution, and adaptations of mammals. *Prerequisites: general biology, general ecology. Corequisite: BIO L548*
- BIO L548 Mammalogy Lab (1)**
A study of the structural features, identification, and classification of mammals. *Corequisite: BIO 5548*
- BIO 5551 Toxicology (3)**
A study of the principles related to the adverse effects of chemicals on living organisms. *Prerequisite: organic chemistry. Corequisite: BIO L551*
- BIO L551 Toxicology Lab (1)**
An assessment of terrestrial and aquatic toxicity of chemical agents following standard protocols. *Corequisite: BIO 5551*
- BIO 5571 Parasitology (3)**
This course covers the taxonomy, structure, life histories, distribution, pathogenesis, and control of parasitic protozoa, helminths, and arthropods, with the emphasis on those of medical importance. *Prerequisites: Any 3000-level BIO lecture and lab. Corequisite: BIO L571*
- BIO L571 Parasitology Lab (1)**
A laboratory study of parasitic protozoa, helminths, and arthropods, with the emphasis on those of medical importance. *Corequisite: BIO 5571*
- BIO 5576 Special Topics (1 to 4 credit hours per course per semester)**
Specialized topics not generally included in course offerings. *Prerequisite: Permission of instructor*
- BIO 5578 Cell Biology (3)**
This course covers cell structure and function with the emphasis on biochemical and molecular mechanisms. Topics include cell movement, differentiation, and recognition. *Prerequisites: genetics, microbiology, organic chemistry. Corequisite: BIO L578*
- BIO L578 Cell Biology Lab (1)**
Experimental approaches for studying cells at the biochemical and molecular levels. *Corequisite: BIO 5578*
- BIO 5580 Histology (3)**
A study of the microscopic anatomy and function of cell types and tissues of mammalian organs. *Prerequisite: general biology. Corequisite: BIO L580*
- BIO L580 Histology Lab (1)**
A study of the microscopic anatomy of cell types and tissues of mammalian organs. *Corequisite: BIO 5580*
- BIO 5582 Molecular Biology (3)**
The study of the fundamental principles of chromosomal organization and gene expression, with emphasis on the structure and function of nucleic acids and proteins. *Prerequisites: genetics, microbiology, organic chemistry. Corequisite: BIO L582*
- BIO L582 Molecular Biology Lab (1)**
Experimental approaches in molecular analyses of nucleic acids and proteins, with the emphasis placed on common techniques utilized in clinical and research settings. *Corequisite: BIO 5582*
- BIO 5592 Guided Independent Research (1-4 credit hours per course per semester)**
Additional information is indexed under "Guided Independent Research and Study."
- BIO 5594 Guided Independent Study (1-4 credit hours per course per semester)**
Additional information is indexed under "Guided Independent Research and Study."
- BIO 6600 Aquatic Entomology (3)**
A study of the morphology, physiology, taxonomy, life histories, and ecology of

aquatic insects. *Prerequisites: general biology, general ecology. Corequisite: BIO L600*

- BIO L600 Aquatic Entomology Lab (1)**
Classification and identification of immature and adult aquatic insects. A collection is required. *Corequisite: BIO 6600*
- BIO 6602 Human Pathophysiology (3)**
This course covers the structural and functional changes in tissues and organs of the human body which cause or are caused by disease. *Prerequisites: human anatomy & physiology and histology, or permission of instructor. Corequisite: BIO L602*
- BIO L602 Human Pathophysiology Lab (1)**
A study of the microscopic anatomy of normal and diseased tissues and organs. *Corequisite: BIO 6602*
- BIO 6606 Economic Botany (3)**
This course covers plants of importance in natural ecosystems and human affairs, with the emphasis on food plants, trees, and medicinal plants. *Prerequisites: Any upper-level botany course. Corequisite: BIO L606*
- BIO L606 Economic Botany Lab (1)**
A study of the basic plant anatomy and taxonomy of plants of significance. *Corequisite: BIO 6606*
- BIO 6620 Field Protistology (4)**
An advanced study of protists from freshwater and marine habitats including collection techniques, taxonomy, identification, structure, life histories and protistan ecology.
- BIO 6621 Environmental Toxicology (3)**
This course is a foundation for scientific decision-making involving contaminants and their effects on biological systems. It covers the basic principles of environmental toxicology including bioaccumulation, the biological effects of toxicants from the molecular to global level of organization, and a basic understanding of the risk of environmental pollutants and the science of risk assessment. *Prerequisites: Eight semester hours or equivalent of chemistry*
- BIO 6624 Public Health (3)**
The impact of the environment on humans as well as the human impact on the environment serve as the dual focus of this course. Environmental agents of physical, chemical, and biological nature with adverse effect on human health will be considered. The physiological, molecular, cellular, genetic, and biochemical mechanisms of action of environmental carcinogens, toxins, pollutant, and other disease-causing environmental

agents and the interaction of various environmental agents with biological systems will be addressed. *Prerequisite: None*

- BIO 6625, 6626 Specialized Study in Biology (1-4)**
The student has the opportunity to engage in intensive study of a particular subject or learn a pertinent skill, which fits his/her academic and/or professional needs but is not available in the regular curriculum. This study may include educational activities or training outside of the University. The student will follow the guidelines that the Department established for the supervision and the pursuance of this study. Requires approval of the student's adviser and chairs.
- BIO 6643 Biological Chemistry (3)**
Biological Chemistry emphasizes the classification, structure, function and metabolism of proteins, carbohydrates, lipids and nucleic acids; intermediary metabolism and bioenergetics; enzyme structure, function and kinetics; and storage and expression of genetic information. *Prerequisites: CHM 3343/L343*
- BIO 6645 Biotechnology Techniques (3)**
Biotechnology Techniques laboratory emphasizes the fundamental theory and techniques used in the isolation, characterization, and study of biochemical molecules. *Prerequisites: CHM 3343/L343*
- BIO 6660 Issues in Aquatic Ecology (3)**
Case studies on the overexploitation and degradation of aquatic ecosystems and their resources, with a primary focus on freshwater systems. *Prerequisite: An undergraduate ecology course is highly recommended.*
- BIO 6661 Conservation Biology (3)**
Examination of the principles, practices, and philosophy of measuring, maintaining, and enhancing biological diversity. The course focuses on the applications of ecology, population biology, and genetics of the conservation of keystone and rare species and ecosystems. *Prerequisite: An undergraduate ecology course is highly recommended.*
- BIO 6662 Invasive Species Biology (3)**
This course will familiarize students with the principles of ecological invasions and factors affecting the spread and impacts of invasive species. Students will also become familiar with major sources of exotic species introductions, and methods available for prevention and control. *Prerequisite: None*
- BIO 6664 Restoration Ecology (3)**
An introduction to ecological approaches toward reconstruction of degraded or destroyed ecosystems. Ecological basis of

creating self-sustained ecosystems. Planning, implementing and assessing restoration programs. Economic and social context of restoration. *Prerequisites: An ecology course and one year of general chemistry.*

- BIO 6665 Sustainable Development (3)**
This course will increase student awareness of sustainability issues concerning the future survival of human and other organisms on the planet. The course specifically covers the following: biological diversity trends, human population growth, agriculture and food consumption issues, water use and supplies, global warming and effects on biological diversity, sustainable fisheries, forest products and services, and other issues. *Prerequisites: None*
- BIO 6670, 6671 Special Topics (1-4)**
Specialized topics not generally included in course offerings. A maximum total of 4 semester hours is allowed for program credit.

BUSINESS

- BUS 6610 Business Research Design (3)**
Designed for the student to develop and demonstrate competency in business research methodology and techniques. This course teaches the MSM or MSHRM student proper research techniques and includes a research proposal. (A grade of "B" or better is required.)
- BUS 6612 Applied Business Research (3)**
The study of applied research of business problems to develop managerial skills in the preparation and evaluation of a research project. (A grade of "B" or better is required.)

CHEMISTRY

- CHM 5500 Special Topics in Chemistry (3)**
A study of topics of special interest, such as advanced physical chemistry, advanced analytical chemistry, advanced organic, group theory, surface chemistry, and colloid chemistry. *Prerequisites: CHM 2242 and CHM 3343*
- CHM 5503 Advanced Organic Chemistry (3)**
A more in-depth study of many of the topics studied in Organic Chemistry I and II. Topics will include reaction mechanisms, synthetic methods, and structure determination using spectroscopic techniques. *Prerequisite: CHM 3357*
- CHM 5544 Advanced Inorganic Chemistry (3)**
This course covers the spectroscopy of inor-

ganic molecules, detailed molecular orbital applications, descriptive chemistry of the transition elements, including organometallics and bioorganic compounds. *Prerequisites: CHM 2242, 5552 and L552*

- CHM L544 Advanced Inorganic Laboratory (1)**
A study of the preparation and characterization of inorganic compounds. Experience will be provided in techniques such as using a tube furnace and handling air-sensitive compounds with a glove bag and Schlenk line. *Corequisite or prerequisite: CHM 5544*
- CHM 5545 Instrumental Analysis (3)**
A study of the operating principles of modern analytical instrumentation for determining composition and concentration. *Prerequisites: CHM 2242, CHM 3343; PHY 2253 and L253 or PHY 2263 and L263. Corequisite: CHM L545*
- CHM L545 Instrumental Analysis Laboratory (1)**
The practical application of select modern analytical instruments to qualitative and quantitative examination of matter. Considerable attention is given to the instrument and elementary electronics involved in each. *Corequisite: CHM 5545*
- CHM 5552 Physical Chemistry I (3)**
A study of the theory and applications of thermodynamics, reaction kinetics, and transport properties with an emphasis on the description of ideal/non ideal gasses and solutions. *Prerequisite: CHM 3343; PHY 2253 and L253 or PHY 2263 and L263; MTH 1126. Corequisite: CHM L552*
- CHM L552 Physical Chemistry I Laboratory (1)**
An introduction to methods and techniques used in the physical chemistry laboratory, including experiments in calorimetry, phase equilibria, reaction kinetics, and transport properties. *Corequisite: CHM 5552*
- CHM 5553 Physical Chemistry II (3)**
A continuation of CHM 5552 with an introduction to surface phenomena, quantum chemistry, and spectroscopy with an emphasis on properties of surfaces, atomic and molecular structure, molecular orbital theory, and photochemistry. *Prerequisite: CHM 5552*
- CHM L553 Physical Chemistry II Laboratory (1)**
A continuation of CHM L552 with an introduction to methods and techniques in computational chemistry and spectroscopy. *Corequisite or prerequisite: CHM 5553*
- CHM 6625, 6626, 6627 Specialized Study in Area of Chemistry (1-4)**
A study of a problem or problems using

research techniques. Selection of problem must be approved by the professor under whom the study is to be made and the Dean of Arts and Sciences. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A Specialized Study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.

CRIMINAL JUSTICE

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| CJ | 5571 | <p>Probation, Pardons, and Parole (3)
This course focuses on the historical developments, philosophies and standards related to the process of probation, pardon, and parole. This course will investigate the use of parole and probation as methods of social control with emphasis on the implications of their social impact on field practice. This course will also investigate non-institutional methods of correctional practices relating to juveniles and adults.</p> | CJ | 6624 | <p>Court Administration (3)
A study of the judicial process from the standpoint of its situational and legal basis, organization and management, and the technical aspects of the judicial function at both trial and appellate levels.</p> |
| CJ | 6610 | <p>Principles of Administration (3)
A survey of the basic principles and functions of personnel administration with special attention paid to criminal justice applications.</p> | CJ | 6625 | <p>Specialized Study (3)
This course provides the student an opportunity to pursue in-depth study on a topic or issue of personal interest under the guidance and direction of a department faculty member. May be repeated up to a total of six credit hours. See semester hour limits listed under Course Restrictions in General Regulations section.</p> |
| CJ | 6620 | <p>Current Trends in Criminal Law (3)
A critical review through case studies of recent trends and developments affecting the interpretation of major portions of the United States Constitution which safeguard personal liberties and those which safeguard the public; an examination of principal trends and changes in the judicial processes in the light of historical experience.</p> | CJ | 6630 | <p>Juvenile Justice (3)
An examination of the agencies, institutions, and personnel that work with juvenile offenders. Of special interest will be how the police, courts and correctional agencies interact and deal with juvenile offenders, as well as a review of the current issues and proposals being discussed at the national level.</p> |
| CJ | 6621 | <p>Current Issues in Corrections (3)
An analysis of the contemporary problems surrounding corrections. Examples of topics include, but are not limited to, police unionization, court reforms, correctional problems, community-based correctional philosophy, comparative issues, and contemporary problems related to correctional officers' retention and employment practices.</p> | CJ | 6635 | <p>Community-Based Corrections/ Correctional Systems (3)
This course will advance the concept of the development of programs for offenders which substitute treatment in the community for institutionalization or imprisonment. Collectively, these programs constitute what is termed "Community-Based Corrections."</p> |
| CJ | 6622 | <p>Seminar in the Administration of Justice (3)
A critical examination of the administration of the criminal justice system in America, including the myths and misconceptions it generates, the controversial issues and trends it produces, and the current and future policies and administrative decision making it promotes.</p> | CJ | 6636 | <p>Criminological Theory (3)
An in-depth overview of major criminological perspectives as well as their nature and extent, especially those found in the United States, and an analysis of the etiology of criminal behavior, criminal law, and the societal reaction to criminals.</p> |
| | | | CJ | 6638 | <p>Seminar in Civil Liberties Related to Corrections (3)
This course is concerned with prisoners' rights as they are guaranteed by the United States judicial system. Because of the ongoing nature of the process defining rights of prisoners currently, decisions of federal appellate and district courts as well as state courts are utilized. This course is a critical review of recent trends and developments affecting personal liberties of incarcerated individuals.</p> |
| | | | CJ | 6640 | <p>Seminar in Law Enforcement (3)
An in-depth examination of the various issues and problems currently being experienced in American policing.</p> |
| | | | CJ | 6644 | <p>Administrative Law (3)
A study of the legal environment in which the public administrator functions. The proc-</p> |

- ess and procedures of administrative agencies including administrative discretion, rule-making, investigating, prosecuting, negotiating, and settling; constitutional law, statutory law, common law, and agency-made law. Liability of governments and their officers. Selected cases and decisions.
- CJ 6649 Statistics for Criminal Justice Research (3)**
This course provides a review of advanced statistical techniques with emphasis upon their application in a criminal justice setting.
- CJ 6650 Survey of Research Methods in Criminal Justice (3)**
An analysis of research strategies employed to study the causes of crime and the societal response to it. (A grade of “B” or better is required.)
- CJ 6652 Seminar in Corrections (3)**
An in-depth examination of the various issues and problems in corrections with a special emphasis relating to administration and management.
- CJ 6655 Selected Topics in Criminal Justice (3)**
An examination of a particular subject which is not offered under the normal course offerings. May be repeated (with different topics) for credit. See semester hour limits listed under Course Restrictions in General Regulations section.
- CJ 6660 Advanced Readings in Criminal Justice (3)**
This course is designed to allow beginning graduate students the opportunity to acquire a basic background in criminal justice literature. The readings will be in specific areas in criminal justice. May be repeated (with different topics) for credit. See semester hour limits listed under Course Restrictions in General Regulations section.
- CJ 6671 Organization Theory (3)**
An examination of the theories of modern criminal justice organization, including current trends and development.
- CJ 6692 Agency Experience (3)**
A supervised practice in an approved criminal justice agency. Reserved for students with no prior experience in a criminal justice setting.
- CJ 6693 Master’s Project (3)**
An applied professional research project involving the analysis of a management or public policy problem, designed for the student who does not wish to write a thesis but nonetheless desires to prepare a major written work in the field of criminal justice.

- CJ 6694 Thesis Practicum (3)**
This course is designed to offer the student who elects to write a thesis an opportunity to review research strategies, initiate a literature search, and prepare preliminary drafts of the thesis. The student will receive a letter grade of “CR” until he/she has completed the thesis.

- CJ 6695 Thesis (3)**
The completion and oral defense of the thesis.

COMPUTER SCIENCE

- CS 5543 Software Engineering (3)**
This course aims at producing good practice in developing software and provides an overview of how to do software engineering using an object-oriented approach. The course assumes familiarity with object-oriented programming. It focuses on the appropriate processes, models and metrics in quality software development. *Prerequisite: CS 4446 or CS 5547*

- CS 5545 Computer Architecture (3)**
Functional descriptions of the major components of digital computer architectures are explored, such as arithmetic and control units, memory hierarchies, channels and characterizations and interactions of individual major components of small and large computers. Also included are minicomputer architectures, specialized computer architectures, and distributed data processing architectures. *Prerequisite: CS 3357, CS 3365 or CS 4445*

- CS 5547 Systems Analysis and Design (3)**
Introduction to information systems development process. Systems analysis methods, covering activities, tools, and techniques for requirements gathering, modeling and specification. Systems design methods, including activities, tools and techniques for design, with an emphasis on architecture, rapid development and prototyping, and detailed design. Introduces classical approaches such as information engineering as well as object-oriented analysis and design. (CS 4446 recommended)

- CS 5549 Analysis of Algorithms (3)**
This course discusses various algorithms that solve searching, sorting, and cryptographic problems. There are many candidate algorithms to solve such problems. Tradeoffs involved when choosing an algorithm are discussed. Sorting algorithms such as merge, insertion, quick, and heap, search algorithms such as binary search tree,

- red-black tree, hashing, and B-Trees are discussed. *Prerequisite: CS 3323*
- CS 5550 Operating Systems Principles (3)**
This course discusses what operating systems are, what they do, how they are designed and organized. Topics discussed include: process management (scheduling, intercommunication, synchronization, and deadlock handling), storage management (memory management and virtual memory management). I/O systems (hardware, interfaces, request-handling, performance issues). Applications of these concepts in modern operating systems such as Windows and Unix are presented. *Prerequisite: CS 3323*
- CS 6625, 6626, 6627 Specialized Study in Computer Science (1-3)**
This course involves the study of a problem or problems using research techniques. Selection of a problem is to be approved by the student's advisor, instructor, college dean, and Dean of the Graduate School. The study should contribute to a student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in the specialized study courses may not exceed three (3) semester hours. The course may not be substituted for a required course. See semester hour limits listed under Course Restrictions in General Regulations section.
- CS 6640 Data Base Management Concepts (3)**
This course discusses design and implementation issues associated with relational and object-oriented databases. Topics include E-R modeling, relational modeling, normal forms, data storage, and concepts of object-oriented data modeling. *Prerequisite: CS 3323*
- CS 6641 Society and Information Systems (3)**
A survey and analysis of individual and societal attitudes, interactions, and decision-making is provided concerning the design and application of computers in information storage, retrieval and processing.
- CS 6643 Theory and Design of Compilers (3)**
The formal properties of grammars, lexical and syntactic analysis, macro generators, and code selection are presented. Additional topics include hardware compilers, extensibility of languages, and implementation of simple compilers. *Prerequisite: CS 3343 or 3370*
- CS 6646 Information Systems for Operations and Management (3)**
- Conceptual and practical foundations of information processing systems' support for management and decision-making functions are examined. Computer system project management, economic and legal considerations of management information systems, systems implementation and evaluation are additional topic areas covered in this course. *Prerequisite: CS 5547*
- CS 6647 Simulation and Modeling (3)**
The theory and design of modeling problems, validation and verification of simulation models for dynamic queuing and static Monte Carlo problems are reviewed. Discrete event and continuous simulation models are analyzed. Random number generation used in simulation languages and the implementation of models on computer hardware and software engineering using general purpose and simulation languages re presented in this course. *Prerequisite: CS 5547*
- CS 6648 Operations Research (3)**
A systems approach is explored as it relates to using various algorithms to solve different classes of managerial problems with a computer. *Prerequisite: CS 3325 or CS 5547*
- CS 6649 Special Topics in CS (3)**
A series of advanced topics in areas of computer science is offered. The course details a structured discussion of varied subjects to include technological updates, a more intense study of topics covered in other course offerings, and an introduction to advanced concepts such as artificial intelligence, the theory of computability, and formal languages. *Prerequisites: 12 semester hours of graduate credit*
- CS 6650 Distributed System Principles (3)**
The invention of high-speed computer networks make it possible to easily put together computing systems composed of large numbers of computers connected by a high-speed network called a Distributive System. This course presents the terminology, concepts, problems and implementations of such systems. Specific Object-Based Distributive Systems like Corba, DCOM and Java Remote Method Invocation (RMI) will be covered. *Prerequisite: CS 3323 or CS 5550*
- CS 6651 Artificial Intelligence (3)**
Intelligent agents, problem-solving, search, knowledge representation and reasoning, planning, and reasoning with uncertain knowledge. Machine learning. Design and implementation of artificial intelligence

- systems including expert systems, planning, logic and constraint programming.
- CS 6652 XML Technology Principles (3)**
This course discusses Extended Markup Language (XML) technology. Topics discussed are XML document creation, document rule definitions such as document type definition (DTD and Schema), XML style languages (XSL and XSLT). Also XML applications and how programming language can process documents are presented. *Prerequisite: CS 3323*
- CS 6653 Topics in Software Security and Reliability (3)**
This course discusses Software Quality, Fundamentals of Reliability and Rates of Failure, Fundamentals of Data and Distributions, Reliability Testing, Software Growth Models, Software Security and Safety Fundamentals, Software Testing and Stopping Rules (Project Topic I), System Reliability and Redundancy, and Integrated and Internet Software System Reliability Security (Project Topic II). *Prerequisite: Permission of the instructor*
- CS 6654 Topics in Software Engineering (3)**
The course extends the topics of the Software Engineering course in which the principles of software development are covered. This course covers advanced topics in software engineering, including software architecture, design patterns, multi-media software, embedded software engineering, and knowledge-based approaches to software engineering. The course also includes a number of case studies. Participants are to write a paper on a topic in Software Engineering. *Prerequisite: CS 5547*
- CS 6655 Digital Logic Design – Principles and Practices with Emphasis on Testable Semicustom Circuits (3)**
Combinational circuit analysis including hazard detection; Number systems and codes; Switching algebra; Combinational circuit design including PLA and MSI techniques; IC logic families; Flip-flop properties; Switching algebra: special properties – symmetric functions, unate functions, threshold functions, Boolean difference, functional decomposition; Introduction to sequential circuits – sequential circuit analysis; Pulse mode sequential circuits – state reduction, incompletely specified machines, state assignment, series-parallel decomposition; Fundamental mode sequential circuits – race, hazards, state assignment; Testing aspects of digital systems – failure and fault models, deterministic test generation for combinational circuits, testing sequential circuits, state identification, testing memories and complex LSI/VLSI circuits, design for testability techniques: scan techniques, built-in self-test (BIST), easily testable network structures; Semicustom and MSI design; Special sequential circuits including sequential integrated circuits. *Prerequisite: CS 5545*
- CS 6656 Design and Testing of Reliable Digital Systems (3)**
Introduction to digital circuits testing. Fault model and test generation for combinational circuits – fault table, path sensitization, ENF, SPOOF and Boolean difference methods. Fault detection in sequential circuits – state identification sequences and designing checking experiments for sequential machines. Design for testability – readily diagnosable and counter-cycle (CC) type sequential machines. Random testing of digital combinational and sequential circuits – continuous-parameter Markov model and error latency model. Built-in self-test (BIST) in VLSI. Data compression in VLSI BIST – concepts of space compression and time compression. Aliasing probability. Fault signature analysis. Fault simulation. Deterministic and pseudorandom test pattern generator. FAN and PODEM. Scan path design. Functional testing of LSI and VLSI circuits – testing microprocessors. Testing of memory devices. Recent trends – embedded systems and systems-on-chip (SOC) design and circuits. Fault tolerance and reliability in modern digital design. *Prerequisite: CS 6655*
- CS 6699 Research and Thesis (1-6)**
Guided research in Computer Science results in the preparation of a scholarly thesis. The thesis includes a discussion of the research design and methodology available to plan and conduct a systematic, thorough, critical, interpretive and analytical research in an area appropriate to the interest of the individual student and consistent with the degree program. The course requires students to prepare a thesis within guidelines provided by the faculty member and to defend it before a thesis committee. *Prerequisites: Unconditional admission to the Master of Science in Computer Science program and completion of twenty-four (24) semester hours of course work*
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- COUNSELING**
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- CP 5535 Treatment of Addictive Family Diseases (3)**
A study of typical characteristics of dysfunctional families. Provides the basis for suggested intervention techniques, appropriate

- areas of family education, and guidelines for effective therapy.
- CP 5536 Treatment Theories and Modalities of Addictive Disease (3)**
A study of historical perspectives and the most effective treatment and assessment approaches of addictive diseases.
- CP 6600 Professional Orientation and Ethics (3)**
An introductory course to the world of professional counseling. Course content includes historical overview, concepts, approaches, philosophy and development of the counseling profession. Professional roles, organizations, credentialing, legal/ethical issues, and professional standards of care are covered. *Prerequisites: Recommended first course.*
- CP 6601 Legal, Ethical, and Professional Standards (3)**
This course assists counseling personnel in acquiring information and understanding necessary to effectively deal with legal, ethical and professional standards of the counseling profession.
- CP 6602 Seminar in the Prevention/Treatment of Chemical Dependency (3)**
An examination of specified issues which must be addressed to promote successful recovery in the treatment of chemical dependency.
- CP 6605 Foundations of Mental Health Counseling (3)**
A study of the historical, philosophical, societal, cultural, economic, and political dimensions within mental health practice. This course will address the professional identity, functions, and issues facing mental health practitioners: principles, theories, and practice of community intervention and the human services network; fiscal and administrative management of programs; and public policy and governmental relations impacting mental health services.
- CP 6610 Facilitation Skills and Counseling Techniques (3)**
A focus on the development and application of basic facilitation skills necessary for becoming an effective helping professional. Skills are developed through a combination of didactic, experiential, and demonstrated learning activities to train the beginning counselor in the establishment and maintenance of therapeutic relationships. *Prerequisites: CP 6600 or adviser's approval.*
- CP 6620, 6621, 6622 Readings in Counseling and Psychology (1-3)**
An independent exploration of the literature related to verbal and nonverbal communication, listening, and human relations under the supervision of a faculty member. An examination will be required upon the conclusion of the course. This course may be offered as a seminar. See semester hour limits listed under Course Restrictions in General Regulations section.
- CP 6625, 6626, 6627 Specialized Study in Counseling (1-3)**
A study of a problem or a topic using research techniques or a guided program of readings. Preparation of a scholarly paper is required and may involve an oral defense. A specialized study may be substituted for only one required course or elective in a student's program. Approval by the student's adviser, the course instructor, and department chair is required. See semester hour limits listed under Course Restrictions in General Regulations section.
- CP 6634 Drug Education, Prevention, and Intervention (3)**
A study of commonly abused drugs, drug abuse prevention, and treatment techniques. Examines characteristics of people at high risk to become substance abusers/addicted.
- CP 6635 Crisis Response Management (3)**
This course provides community personnel, school personnel and other education and/or health professionals/paraprofessionals information about the nature of global and local disasters. Course content includes appropriate responses to a variety of crisis scenarios and information on major theories of crisis intervention.
- CP 6636 Foundations of Student Affairs (3)**
This course is designed to provide a comprehensive introduction to the field of student affairs in higher education through a review of its historical and philosophical influences; purpose, roles, and functions; and contemporary issues and trends.
- CP 6637 Administration of Student Affairs Programs (3)**
This course is designed to provide the knowledge and skills required for effective administration of student affairs in higher education. The course will focus on designing, managing, and evaluating student affairs programs.
- CP 6638 Internship: Student Affairs Counseling (3)**
This course provides supervised student affairs counseling experiences in the college environment. The experience is accompanied by scheduled on-campus supervision with the university supervisor. Internship equals 300 clock hours, to include 120 hours of direct student affairs service.

- CP 6639 Internship: Student Affairs Counseling (3)**
This course provides supervised student affairs counseling experiences in the college environment. The experience is accompanied by scheduled on-campus supervision with the university supervisor. Internship equals 300 clock hours, to include 120 hours of direct student affairs service.
- CP 6641 School Counseling and Program Management (3)**
In this course students will study planning, designing, implementing, and evaluating a comprehensive developmental school guidance program. The school counselor's role as an advocate and school leader will be emphasized. Historical perspective, new academic achievement, guidance curriculum and ethical and legal issues will be included.
- CP 6642 Group Dynamics and Counseling (3)**
The study of group dynamics and group counseling theories, including ethics, group leadership styles, types of groups, group counseling methods and skills, group developmental stages, and therapeutic factors of group work. Experiential activities included. *Prerequisite: CP 6610 or adviser's approval.*
- CP 6644 Community Counseling Services (3)**
A study of multifaceted, comprehensive, community counseling and school psychological services, needs assessment, resource identification, program development, and program evaluation. Alternative models of service delivery and alternative sources of funding and program regulation are explored.
- CP 6649 Theories of Counseling (3)**
A study of the major theoretical approaches in counseling including the affective, behavioral, and cognitive theories. Application of theories to basic types of problems in the counseling relationship is included. Includes case studies, class demonstrations, and role-playing. *Prerequisites: CP 6600 and CP 6610 or adviser's approval.*
- CP 6650 Practicum (3)**
This study provides an opportunity for the student to perform, under supervision, a variety of activities that a regularly employed professional counselor would perform. Practicum provides for the development of counseling skills under supervision. The student must complete 100 clock hours including a minimum of 40 hours of direct service with clients. Experiences are accompanied by regularly scheduled, weekly on-campus group supervision designed to provide opportunity for analysis and evaluation of supervised activity. *Prerequisites: Permission of instructor and department chair required. CP 6600, CP 6610, CP 6642, CP 6649, PSY 6669, PSY 6670*
- CP 6651 Counseling Diverse Populations (3)**
A study of the psychological and sociological factors relative to cultural diversity. Special emphasis is placed on current practices utilized in counseling interventions with culturally diverse populations. Special emphasis is placed on current practices utilized in counseling interventions with diverse populations as well as increasing counselor sensitivity to the unique needs and experiences of such populations.
- CP 6652 Rehabilitation Delivery and Process (3)**
A study of the rehabilitation process including historical developments, philosophical bases, and legal aspects, with an emphasis on the operational aspects of rehabilitation service delivery systems.
- CP 6656 Marriage, Family, and Sex Therapy Counseling (3)**
The course is designed to provide the student with a conceptual framework for dealing with marriage and family problems. Students will be equipped with the skills necessary for working with all members of the family.
- CP 6657 Internship: School Counseling (3)**
This course provides supervised school based experience at both the elementary and secondary levels. The school-based experience will be accompanied by scheduled on-campus supervision with the university supervisor. Course equals 300 hours of internship. Internship equals 300 clock hours, to include 120 hours of direct student service. *Prerequisite: CP 6650.*
- CP 6658 Internship: School Counseling (3)**
This course provides supervised school-based experience at both the elementary and secondary levels. The school-based experience will be accompanied by scheduled on-campus supervision with the university supervisor. Internship equals 300 clock hours, to include 120 hours of direct student service. *Prerequisite: CP 6657*
- CP 6659 Internship: Mental Health (3)**
This course provides an opportunity for the student to perform under supervision a variety of activities that a regularly employed professional counselor in an agency setting would be expected to perform. Experiences are accompanied by regularly scheduled, weekly group supervision. Course equals 300 clock hours of internship. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: Completion of CP 6650 and adviser approval.*
- CP 6660 Internship: Mental Health (3)**
This course provides an opportunity for the student to perform under supervision a vari-

- ety of activities that a regularly employed professional counselor in an agency setting would be expected to perform. Experiences are accompanied by regularly scheduled, weekly group supervision. Course equals 300 clock hours of internship. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: Completion of CP 6650 and adviser approval.*
- CP 6661 Internship: Mental Health (3)**
This course provides an opportunity for the student to perform under supervision a variety of activities that a regularly employed professional counselor in an agency setting would be expected to perform. Experiences are accompanied by regularly scheduled, weekly group supervision. Course equals 300 clock hours of internship. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: Completion of CP 6650 and adviser approval.*
- CP 6662 Internship: Community Counseling (3)**
This course provides supervised, on-the-job, experiences in Community Counseling. These field experiences are accompanied by weekly, on-campus, supervised sessions. Students must receive individual and group supervision. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: Completion of CP 6650 and adviser approval.*
- CP 6663 Internship: Community Counseling (3)**
This course provides supervised, on-the-job, experiences in Community Counseling. These field experiences are accompanied by weekly, on-campus, supervised sessions. Students must receive individual and group supervision. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: Completion of CP 6650 and adviser approval.*
- CP 6670 Internship: Rehabilitation Counseling (3)**
This course provides supervised experience in a rehabilitation setting. The experience will be accompanied by scheduled on-campus supervision with the university supervisor. Course equals 300 clock hours of internship. Students may take up to six semester hours of internship per semester with
- adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: Completion of CP 6650 and adviser approval.*
- CP 6671 Internship: Rehabilitation Counseling (3)**
This course provides supervised experience in a rehabilitation setting. The experience will be accompanied by scheduled on-campus supervision with the university supervisor. Students may take up to six semester hours of internship per semester with adviser approval. Each student must complete 120 hours of direct service with clients. *Prerequisite: CP 6670.*
- CP 6680 Seminar: Counseling Approaches to Working with Hearing Impairment (3)**
This course is taken in conjunction with the practicum/internship in rehabilitation counseling, offers students an opportunity to apply medical, psychological and sociological research/techniques to counseling with individuals who are hearing impaired. *Prerequisite: Permission of instructor.*
- CP 6681 Seminar: Counseling Approaches to Working with Visual Impairment (3)**
This course is taken in conjunction with the practicum/internship in rehabilitation counseling, offers students an opportunity to apply medical, psychological and sociological research/techniques to counseling with individuals who are visually impaired. *Prerequisite: Permission of instructor.*
- CP 6682 Leadership and Advocacy: Hearing Impairment (3)**
The purpose of this course is to develop an appreciation for the organization, administration, and coordination of services for the hearing impaired. Strategies for consulting with various agencies, educating the general public, counseling with hearing impaired and their families as well as approaches for advocating for these populations will be explored. *Prerequisites: CP 6650, CP 6652, CP 6653. Taken in conjunction with internship.*
- CP 6683 Leadership and Advocacy: Visual Impairment (3)**
The purpose of this course is to develop an appreciation for the organization, administration and coordination of services for the visually impaired. Strategies for consulting with various agencies, educating the general public, counseling with the visually impaired and their families as well as approaches for advocating for these populations will be explored. *Prerequisites: CP 6650, CP 6652, CP 6653. Taken in conjunction with internship.*

CP	6685	Case Management (3) A study of the case management process, including case findings, service coordination, referral and utilization of other disciplines, and client advocacy.	Preparation of a scholarly paper is required and may involve an oral defense. A specialized study may be substituted for only one required course or elective in a student's program. <i>Approval by the student's adviser, the course instructor, and department chair is required.</i>
CP	6686	Job Development and Placement (3) A study of the analysis of job development and placement in the rehabilitation process and related fields.	
CP	6687	Placement of Special Disability Groups (3) A study of effective job development and placement techniques and strategies in the rehabilitation process for disability groups traditionally challenging to place: Blind, Deaf, Hard of Hearing, Mentally Ill, Traumatic Brain Injured, Spinal Cord Injured, Multidisabled and Learning Disabled.	
CP	6691	Research Methodology (3) The study and evaluation of research methods commonly used in the social sciences. The course will provide information necessary to understand and apply research processes, synthesize knowledge and writing, and plan and organize research problems for interpretation and application of research results. Application of these skills in the form of a written project using the Publication Manual of the American Psychological Association (APA) is required. A grade of "B" or better is required	
CP	7700	Advanced Practicum in Group Leadership (3) Supervised training in group leadership, including experiential and didactic activities, focusing on group facilitation. <i>Prerequisites: CP 6642 and CP 6650 or equivalents and permission of the instructor. Enrollment restricted to Ed.S. students.</i>	
CP	7701	Seminar in Counseling and Student Personnel Work (3) Individual readings and conferences, group discussions and reports focusing on the advanced student's special interest in Counseling and Human Development. Emphasizes research findings.	
CP	7702	Advanced Theories and Techniques of Counseling (3) An in-depth study of current viable theories of counseling utilizing techniques appropriate for each framework. Some areas to be covered include the cognitive, affective, and eclectic approaches. <i>Prerequisite: CP 6649 or equivalent.</i>	
CP	7725, 7726, 7727	Advanced Studies in Counseling (1-3) A study of a problem or topic using research techniques or a guided program of readings.	
CP	7753, 7754, 7755	Internship: Advanced Counseling (1-3) This course provides advanced graduate students with full-time, supervised, on-the-job experience in setting appropriate to their area of specialization. Experiences accompanied by weekly on-campus meetings designed to provide opportunity for analysis and evaluation of supervised activity.	
CP	7791, 7792, 7793	Research Seminar (1-3) This course provides in-depth assistance to prepare students for development of, research for, and preparation of thesis or field project proposal.	
CP	7794	Field Project (3) An independent study of a problem of a practical nature which is encountered in a field setting. A proposal for the study and a written report of the findings must be approved by the student's advisory committee. The advisory committee will administer an oral examination covering the research findings. <i>Enrollment limited to Ed.S. students.</i>	
CP	7795, 7796	Thesis (3-6) Research for and preparation of a scholarly paper related to a counseling and guidance problem or situation under the supervision of the student's advisory committee. <i>Enrollment limited to Ed.S. students.</i>	
DRAMA			
DRA	5543	Theatre History I (3) A history of the theatre from the origin of tragedy through English drama of the 17th century. A study of dramatic literature and elements of the theatre designed to enhance the student's appreciation of contemporary theatrical practices in the staging of the "classics".	
DRA	5551	Directing I (3) Script analysis and directing principles with studies in the direction of contemporary scenes and one-act plays.	
DRA	6625	Specialized Study in Area of Theatre (1-3) Under the supervision of the faculty course supervisor, the student may pursue an extensive study of a particular area which fits his/her academic needs but is not available in the regular curriculum. Each proposal must be approved the preceding term by the student's advisor, the faculty course supervisor,	

and the department chairperson. Total credit for any combination of enrollments in these courses may not exceed six semester hours. See semester hour limits listed under Course Restrictions in General Regulations section.

EDUCATIONAL ADMINISTRATION

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|-----|------|---|-----|------------|---|
| EAL | 6603 | <p>School Business Procedures (3)
This is a comprehensive course designed to focus on the skills and knowledge needed to conduct school business procedures at two levels: school and district. The purpose is to concentrate on the principles and best practices necessary to manage those business transactions for effective school business administration. Restricted to students who are admitted to an NCATE approved EAL Certification program and must be taught by an individual who has successfully completed the Finance requirement under Alabama Code (Act 2001-706, Section 16-1-38).</p> | EAL | 6615 | <p>Social and Philosophic Foundations of Educational Leadership (3)
This course provides an overview of the societal structure and problems affecting education as well as the philosophical schools of thought in educational leadership. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> |
| EAL | 6607 | <p>Readings in Organization and Administration (3)
This course explores current literature and thinking in the field of organizational and administrative theory and practice pertaining to educational leadership. <i>Prerequisite: Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> | EAL | 6625 | <p>Special Topics in Educational Leadership (3)
A seminar concerned with an in-depth examination of one topic that is acutely important to educational leadership. Students are expected to use primary resources, journals, Internet to research and discuss the topic. The primary format of the class will be discussion, although group exercises, individual presentations and written responses will also be used. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> |
| EAL | 6609 | <p>Communication and Problem Solving for School Leaders (3)
This course is designed to improve the school leaders' skills in communication and problem solving. Emphasis will be placed on listening skills, group dynamics, conflict resolution and consensus building. Special attention will be given to these topics while working with ethnically or culturally diverse populations. <i>Prerequisite: Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> | EAL | 6626, 6627 | <p>Specialized Topics in Educational Leadership (3)
An independent study of a problem or problems using research techniques. Selection of problem must be approved by the professor under whom the study is to be conducted, and the Department Chair. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral presentation. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> |
| EAL | 6610 | <p>Grant Writing and Fundraising (3)
This course explores how to write a grant and discusses alternative ways of fundraising. Particular attention will be given to grant writing protocols and procedures, as well the dynamics involved in responding to a Request for Proposal, and understanding the school system's bureaucratic structures. <i>Prerequisite: Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> | EAL | 6633 | <p>Educational Leadership (3)
This course deals with the development of knowledge and skills needed for the responsibilities and major functions of educational leaders. The concept of leadership is discussed from both a theoretical and practical standpoint. Distinctions between management skills and leadership skills are emphasized. Key leadership challenges such as vision, motivation, staff development, inclusive decision-making and strategic planning are stressed. Historical and contemporary accounts of successful leaders are utilized. The ethical and moral aspects of leadership are examined. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p> |
| EAL | 6613 | <p>Legal Issues in Public Education (3)
This course provides an introduction to the legal basis for public education and patterns of education control. Some attention is given to the necessity of providing a variety of</p> | | | |

EAL	6643	<p>Administration of School Personnel (3) This course is designed to deal with the selection, staffing and development of all school personnel. Salary schedules, personnel policies and fringe benefits will be studied. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p>	<p>must be completed at the home campus (<i>Prerequisite: EAL 6663 and permission of the Department</i>). There must be a minimum of six months from beginning EAL 6663 and the completion of this course.</p>
EAL	6653	<p>Educational Evaluation for School Improvement (3) This course focuses on basic statistical processes and measures used in education. It provides an opportunity for the student to analyze a variety of standardized prognostic, diagnostic, and achievement tests and to evaluate teacher-made tests and other measuring devices. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p>	<p>EAL 6684 Curriculum Development for Educational Leaders (3) This course prepares school administrators to provide leadership necessary to ensure appropriate curricula for the schools and for effective teaching and learning. Students will examine the curriculum design, development, implementation, and evaluation cycle. <i>Prerequisite: Restricted to students who are admitted to an NCATE approved EAL Certification program.</i></p>
EAL	6663	<p>Internship in Educational Administration I (3) The purpose of this course is to provide students with school-based administrative experience in elementary, middle and secondary grades, as well as central office support functions. Full-time university educational administration faculty and local public school supervisors oversee the intern to ensure field experience is acquired in the areas of curriculum, instruction, student services, leadership skills, staff development, school and community relations, management skills, and legal responsibilities. Competencies to be addressed are taken from the Alabama State Department of Education Administrative Code. Internship requires a minimum of 300 clock hours and must be completed at the home campus (<i>Prerequisite: Restricted to students who are admitted to an NCATE approved EAL Certification program and have permission of the Department.</i>) There must be a minimum of six months from the beginning of this course to the completion of EAL 6664.</p>	<p>EAL 6691 Research Methodology (3) This course is a study and evaluation of a variety of research methods; including but not limited to quantitative, qualitative, and action research, and reporting formats used in education and the social sciences. <i>Restricted to students who are admitted to an NCATE approved EAL Certification program.</i> A grade of "B" or better is required.</p>
EAL	6664	<p>Internship in Educational Administration II (3) The purpose of this course is to provide students with school-based administrative experience in elementary, middle and secondary grades, as well as central office support functions. Full-time university educational administration faculty and local public school supervisors oversee the intern to ensure field experience is acquired in the areas of curriculum, instruction, student services, leadership skills, staff development, school and community relations, management skills, and legal responsibilities. Competencies to be addressed are taken from the Alabama State Department of Education Administrative Code. Internship requires a minimum of 300 clock hours and</p>	<p>EAL 7701 Administration of Special Education (3) This course is designed to provide an in-depth overview of the administrative organization that supports effective special education programs in diverse educational settings. The purpose of the course is to provide a comprehensive guide to the special education process while addressing current issues, trends, technology, research, literature, problems, legal principles, and concerns. The course is designed to provide the school leader with the knowledge base to make informed, reflective special education decisions. Class A Certification in Educational Administration is required.</p>
			<p>EAL 7705 School Finance and Taxation (3) A general study of finance at local, state, and federal basis. Includes principles of taxation, the concepts of equity and adequacy, acceptable practices in securing and administering school funds, and acceptable accounting and business procedures. Explores the unique characteristics of the Alabama Tax structure, its history, and impact on the funding of education. Class A Certification in Educational Administration is required. Course must be taught by an individual who has successfully completed the Finance requirement under Alabama Code (Act 2001-706, Section 16-1-38).</p>
			<p>EAL 7710 Supervision of Education (3) A development of the concept of supervision and its function in the school program. The techniques of supervision are studied and related to the improvement of instruction.</p>

- Class A Certification in Educational Administration is required.
- EAL 7714 School Law (3)**
A study of school law as set forth in the common law, state and federal constitution, statutes, judicial decision, and in the rules and regulations of the state of Alabama. Major emphasis will be on state and federal law and its impact on education today. Class A Certification in Educational Administration is required. Course must be taught by an individual who has successfully completed the Law requirement under Alabama Code (Act 2001-706, Section 16-1-38).
- EAL 7717 Mentoring Methods and Techniques (3)**
The purpose of this course is to prepare educational leaders to serve as role models and mentors for individuals and to develop mentorship programs. Students will learn how to develop and organize a mentorship program for beginning teachers. Students will develop a knowledge base upon which to make informed reflective decisions about mentorship programs in diverse educational settings. Class A Certification in Educational Administration is required.
- EAL 7725 Specialized Topics in Educational Leadership (3)**
A seminar concerned with an in-depth examination of one topic that is acutely important to educational leadership. Students are expected to use primary resources, journals, and the Internet to research and discuss the topic. The primary format of the class will be discussion, although group exercises, individual presentations and written responses will also be used. Class A Certification in Educational Administration is required.
- EAL 7726 Specialized Topics in Educational Leadership (3)**
An independent study of a problem or problems using research techniques. Selection of problem must be approved by the professor under whom the study is to be conducted, and the department chair. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral presentation. Class A Certification in Educational Administration is required.
- EAL 7727 Specialized Topics in Educational Leadership (3)**
An independent study of a problem or problems using research techniques. Selection of problem must be approved by the professor under whom the study is to be conducted, and the department chair. The study should contribute to the student's program. Preparation of a scholarly paper is required and may
- involve an oral presentation. Class A Certification in Educational Administration is required.
- EAL 7735 Development and Operation of Educational Plant Facilities (3)**
This course is designed to present to the student procedures and issues related to the design, development, and operation of educational plant facilities. Class A Certification in Educational Administration is required.
- EAL 7742 History of Educational Leadership (3)**
This course will explore the rich tradition and history of the field of Educational Leadership. The history of the theory and practices associated with this field will be examined and reviewed. Class A Certification in Educational Administration is required.
- EAL 7746 Personnel Relations and Processes in Educational Leadership (3)**
This course deals with personnel processes and personnel management from the perspective of the central office. Topics include: human resource planning, forecasting, selection, staff development, training and evaluation. Also included are motivational principles, group dynamics, climate and culture, as well as problems typically associated with personnel. Class A Certification in Educational Administration is required.
- EAL 7758 Cultural Diversity (3)**
This course provides in-class and field experiences for specialist students in the investigation of current diversity, multicultural and pluralistic literature and in the identification and creation of organizational patterns/designs, which support both short-and long-range multicultural and diversity school goal setting. Students will learn competencies that are instrumental to planning, implementing, assessing, and re-evaluating existing or proposed practices. Activities are designed to appraise and evaluate diversity data, coordinate and synthesize curriculum development, utilize appropriate instructional designs including delivery, resources to manage change in their school's community. Emphasized is student reflection, the interpretation and utilization of data collected for the improvement of diversity, and multicultural programs. Class A Certification in Educational Administration is required.
- EAL 7790 Trends, Issues, and Policy Studies in Educational Leadership (3)**
This is a seminar concerned with the trends and issues that arise based on educational policy. It offers a balance and reintegration of the relationship between policy studies and politics. Emphasis is placed on how

educational policymaking occurs. Highlighted are the tools needed for investigating the current trends and issues impacting public education from a national, state, and local level. Class A Certification in Educational Administration is required.

EAL 7791 Organizational and Administrative Behavior (3)

A study of the nature, culture, and structure of organizations. Leadership, managerial and administrative behaviors will also be investigated, with a focus on educational organizations and change. Class A Certification in Educational Administration is required.

EAL 7793 Statistics (3)

This course is a study of descriptive and inferential statistics commonly used in the literature of Educational Administration. Emphasis is placed on the application of statistical method to research design. Instruction deals specifically with measures of central tendency and variability, probability theory, estimation and significance, correlation and regression, analysis of variance, and chi-square. Class A Certification in Educational Administration is required.

EAL 7794 Thesis: Field Problem Analysis (3)

The purpose of this course is to prepare educational leaders with research/knowledge that supports informed, reflective decisions in diverse educational settings. Technology as a tool to investigate problems being faced by schools is employed. Emphasis is given to the proposal phase of designing a research project. The research project examines a problem of a practical nature, which is encountered in a field setting. The course culminates in the creation of the research proposal, which is a compilation of the theory, and methods learned in the course. All studies that deal with human subjects must be approved by their campus research review board. Class A Certification in Educational Administration is required.

EAL 7795 Thesis: Problem Analysis Implementation (1-3)

The purpose of this course is for students to implement the project or field study proposed in EAL 7794. Data will be collected, analyzed and summarized in writing. A summary of the project and recommendations for further study should also be submitted. The faculty adviser may require the student to defend the study before a faculty committee. The course is designed to prepare educational leaders with research knowledge that supports informed reflective decisions in diverse educational settings. Class A Certification in Educational Administration is required.

ENVIRONMENTAL AND BIOLOGICAL SCIENCES

EBS 5513 Limnology (3)
The physical, chemical, geological, and biological aspects of freshwater ecosystems as influenced by activities in surrounding watersheds. *Prerequisite: general biology. Corequisite: EBS L513*

EBS L513 Limnology Lab (1)
Field and laboratory exercises in lake and stream science, including instrumentation, measurement, sampling, and analysis. *Corequisite: EBS 5513*

EBS 5516 Microbial Ecology (3)
The study of the 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. *Prerequisites: microbiology, organic chemistry. Corequisite: EBS L516*

EBS L516 Microbial Ecology (1)
Microbial ecology laboratory techniques including isolation, identification, and enumeration of microorganisms from aquatic and terrestrial environments. *Corequisite: EBS 5516*

EBS 5520 Field Vertebrate Zoology (4)
The basics of vertebrate identification, with emphasis on phylogeny, anatomy, morphology, life histories, habitats, distributions, and conservation. *Prerequisites: general biology, general chemistry*

EBS 5521 Population Ecology (3)
A study of animal and plant populations, food supply, competition, disease, fecundity, distribution, and other environmental factors. Management of endangered species and protected ecosystems are included. *Prerequisites: general ecology, genetics, general chemistry, statistics. Corequisite: EBS L521*

EBS L521 Population Ecology Lab (1)
Field exercises in identifying ecological problems, formulating and testing hypotheses, and evaluating data using standard statistical methods. *Corequisite: EBS 5521*

EBS 5525 Field Botany (4)
A 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: general biology, general ecology*

- EBS 5530 Applied Genetics (3)**
Advanced studies in genetics with emphasis on cytogenetics and molecular genetics. *Prerequisites: genetics, organic chemistry. Corequisite: EBS L530*
- EBS L530 Applied Genetics Lab (1)**
An introduction to procedures and equipment used in the study of cytogenetics and molecular genetics. *Corequisite: EBS 5530*
- EBS 5550 Environmental History of the U.S. (3)**
An introduction to environmental history of the United States from the 18th century to the late 20th century, emphasizing the post World War II period. The course will focus on the historical development of the science of ecology, the origins of environmental problems and solutions attempted by government and experts, as well as responses by grassroots activists over time.
- EBS 5551 Toxicology (3)**
A study of the principles related to the adverse effects of chemicals on living organisms. *Prerequisite: organic chemistry. Corequisite: EBS L551*
- EBS L551 Toxicology Lab (1)**
Assessment of terrestrial and aquatic toxicity of chemical agents following standard protocols. *Corequisite: EBS 5551*
- EBS 5552 Industrial Hygiene (3)**
Identification and correction of chemical, biological, and physical hazards in and around the workplace. *Prerequisite: organic chemistry. Corequisite: EBS L552*
- EBS L552 Industrial Hygiene Lab (1)**
Methods and procedures for sampling, analyzing, and evaluating chemical, biological, and physical agents in the workplace. *Corequisite: EBS 5552*
- EBS 5576 Special Topics (1 to 4 credit hours per course per semester)**
Specialized topics not generally included in course offerings. *Prerequisite: Permission of instructor*
- EBS 5578 Cell Biology (3)**
This course covers cell structure and function with the emphasis on biochemical and molecular mechanisms. Topics include signal transduction, cytoskeleton, intracellular compartments, cell movement, differentiation, and recognition. *Prerequisites: genetics, microbiology, organic chemistry. Corequisite: EBS L578*
- EBS L578 Cell Biology Lab (1)**
Experimental approaches for studying cells at the biochemical and molecular levels. *Corequisite: EBS 5578*
- EBS 5582 Molecular Biology (3)**
A study of the fundamental principles of chromosomal organization and gene expression, with emphasis on the structure and function of nucleic acids and proteins. *Prerequisites: genetics, microbiology, organic chemistry. Corequisite: EBS L582*
- EBS L582 Molecular Biology Lab (1)**
Experimental approaches in molecular analyses of nucleic acids and proteins, with the emphasis placed on common techniques utilized in clinical and research settings. *Corequisite: EBS 5582*
- EBS 6600 Aquatic Entomology (3)**
A study of the morphology, physiology, taxonomy, life histories, and ecology of aquatic insects. *Prerequisites: general biology, general ecology. Corequisite: EBS L600*
- EBS L600 Aquatic Entomology Lab (1)**
Classification and identification of immature and adult aquatic insects. A collection is required. *Corequisite: EBS 6600*
- EBS 6601 Environmental and Biological Ethics (3)**
Examination of major ethical theories as they apply to environmental, biological, and medical issues. The linkage of ethics to decision-making in social, public, and business policy. Course develops skills in understanding value systems and framing ethical positions.
- EBS 6603 Environmental Management (3)**
Concepts and practices underlying procedures for environmental resource management, including planning, organizing, and conducting programs.
- EBS 6611 Global Pollution and International Environmental Policy (3)**
An examination of global environmental issues, such as global climate change, ozone depletion, and acid precipitation. This course also deals with alternatives in developing global policies and treaties to address these problems.
- EBS 6612 Environmental Impact Studies/Risk Management (3)**
An examination of practices used in analysis of land, water, and air to determine the impact of human activities such as construction, mining, clearing, and industrial operation. Planning approaches and ecological constraints, economic evaluation, and quantitative approaches to predict impact. *Prerequisites: EBS 6630, EBSL630*
- EBS 6615 Environmental Law, Permitting, and Regulatory Compliance (3)**
A study of the steps needed and programs

required to insure that public and private sector organizations are in compliance with federal and state environmental regulations. *Prerequisites: An undergraduate ecology or environmental course, or approval of adviser.*

EBS 6617, 6618 Seminars in Environmental and Biological Sciences (1)

Presentations on interdisciplinary principles and concepts, current issues, and new studies and research from a variety of fields, with environmental science serving as a unifying theme. Faculty members and outside speakers will present guest lecturers. Candidates for the master's degree in the thesis option will present their research findings and conclusions.

EBS 6620 Field Protistology (4)

An advanced study of protists from freshwater and marine habitats including collection techniques, taxonomy, identification, structure, life histories, and protistan ecology.

EBS 6621 Environmental Toxicology (3)

This course is a foundation for scientific decision-making involving contaminants and their effects on biological systems. It covers the basic principles of environmental toxicology including bioaccumulation, the biological effects of toxicants from the molecular to global level or organization, and a basic understanding of the risk of environmental pollutants and the science of risk assessment. *Prerequisites: Eight semester hours or equivalent of chemistry*

EBS 6623 Environmental Negotiations and Conflict Resolution (3)

An examination of the approaches to resolving environmental disputes through alternative dispute resolution techniques.

EBS 6624 Public Health (3)

The impact of the environment on humans as well as the human impact on the environment serve as the dual focus of this course. Environmental agents of physical, chemical, and biological nature with adverse effect on human health will be considered. The physiological, molecular, cellular, genetic, and biochemical mechanisms of action of environmental carcinogens, toxins, pollutant, and other disease-causing environmental agents and the interaction of various environmental agents with biological systems will be addressed. *Prerequisite: None*

EBS 6625, 6626 Specialized Study in Environmental and Biological Sciences (1-3)

The student has the opportunity to engage in intensive study of a particular subject or learn a pertinent skill, which fits his/her academic and/or professional needs, but is

not available in the regular curriculum. This may include educational activities or training outside of the University. The student will follow the guidelines that the Department has established for the supervision and the pursuance of this study. *Requires approval of the student's adviser and the department chair.* See semester hour limits listed under Course Restrictions in General Regulations section.

EBS 6630 Pollution Science (3)

A study of pollution of atmosphere, surface water, and soil and groundwater from animate activities and inanimate processes. Adverse effects, fate, and transport of pollutants in air, soil, and water. *Prerequisite: general chemistry. Corequisite: EBS L630*

EBS L630 Pollution Science Lab (1)

Theory and analytical techniques used in both field and laboratory for the analysis of air, water, and soil contaminants. *Corequisite: EBS 6630*

EBS 6643 Biological Chemistry (3)

Biological Chemistry emphasizes the classification, structure, function and metabolism of proteins, carbohydrates, lipids and nucleic acids; intermediary metabolism and bioenergetics; enzyme structure, function and kinetics; and storage and expression of genetic information. *Prerequisites: CHM 3343/L343*

EBS 6645 Biotechnology Techniques (3)

Biotechnology Techniques laboratory emphasizes the fundamental theory and techniques used in the isolation, characterization, and study of biochemical molecules. *Prerequisites: CHM 3343/L343*

EBS 6650 Spatial Analysis Using Geographical Information Systems (3)

A graduate level GIS course geared for beginners that presents the understanding behind the four functional and physical components of a GIS: data input; storage and retrieval; manipulation; and data output. Multiple GIS applications are also discussed. *Prerequisites: EBS 6630, EBS L630, or permission of chair. Corequisite: EBS L650*

EBS L650 Spatial Analysis Using Geographical Information Systems (1)

This lab is intended for average computer users with little or no experience in ArcView GIS or any other GIS software. At the end of the labs, students will be able to use ArcView to view, query, analyze, chart, and map geographic data. *Corequisite: EBS 6650*

- EBS 6660 Issues in Aquatic Ecology (3)**
Case studies on the overexploitation and degradation of aquatic ecosystems and their resources, with a primary focus on freshwater systems. *Prerequisite: An undergraduate ecology course is highly recommended.*
- EBS 6661 Conservation Biology (3)**
Examination of the principles, practices, and philosophy of measuring, maintaining, and enhancing biological diversity. The course focuses on the applications of ecology, population biology, and genetics of the conservation of keystone and rare species and ecosystems. *Prerequisite: An undergraduate ecology course is highly recommended.*
- EBS 6662 Invasive Species Biology (3)**
This course will familiarize students with the principles of ecological invasions and factors affecting the spread and impacts of invasive species. Students will also become familiar with major sources of exotic species introductions, and methods available for prevention and control. *Prerequisite: None*
- EBS 6664 Restoration Ecology (3)**
An introduction to ecological approaches toward reconstruction of degraded or destroyed ecosystems. Ecological basis of creating self-sustained ecosystems. Planning, implementing and assessing restoration programs. Economic and social context of restoration. *Prerequisites: an ecology course and one year of general chemistry*
- EBS 6665 Sustainable Development (3)**
This course will increase student awareness of sustainability issues concerning the future survival of human and other organisms on the planet. The course specifically covers the following: biological diversity trends, human population growth, agriculture and food consumption issues, water use and supplies, global warming and effects on biological diversity, sustainable fisheries, forest products and services, and other issues. *Prerequisites: None*
- EBS 6670, 6671 Special Topics (1-4)**
Specialized topics not generally included in course offerings. A maximum total of four semester hours is allowed for program credit.
- EBS 6691 Research Methodology and Experimental Design (3)**
This course will include hands-on statistical experience emphasizing hypothesis testing using a statistical software system. It will combine several elements of research methodology including developing a grant proposal that will include topic selection, literature search, question formulation, methods, statistics, and a budget. *Prerequisite: Three*
- EBS 6695 Thesis Research (1-6)**
Under the guidance of the student's adviser and the chair of the department, the student may pursue original research (independent acquisition and interpretation of data) in a particular area of environmental science. The completion of a thesis is required. The results and conclusions must be successfully defended before the student's graduate committee.
- Refer to specific departmental listings in the *Troy University Graduate Catalog* for full course descriptions of BIO (biology), BUS (business), CHM (chemistry), and GEO (geography). Information pertaining to MB (marine biology) is also provided.
- Note: Graduate students may not enroll in a 5000 numbered course if it duplicates the same course listed on an undergraduate transcript.*
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- EARLY CHILDHOOD EDUCATION**
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- ECE 5544 Internship Seminar (3)**
This course provides interns an opportunity to develop analytical thinking skills through examining 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. This course must be taken concurrently with internship.
- ECE 6618 Designing Prosocial Learning Environments (3)**
An examination of early childhood education learning environments. Program models such as the English Infant School, the Open School, Montessori's Prepared Learning Environment and other selected models will be studied. In addition, techniques for creating, maintaining, and assessing an environment that fosters knowledge construction, integration of technology resources, the development of autonomy, and independence will be examined. Students will investigate and implement these techniques with young children.
- ECE 6620 Inquiries into Physical Knowledge (3)**
The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding about their own questions related to young children's construction of physical knowledge and the facilitation and evaluation of that knowledge construction in the early childhood class-

room. In addition, the students will interact with young children through observation and participation in the application of appropriate physical knowledge experiences and the investigation and evaluation of children's construction of knowledge.

ECE 6622 Parents as Partners in Education (3)
 The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding of and develop techniques to strengthen the school-parent relationship while developing mutual supporters for the total development of the young child. Pertinent topics include: stress and children, parents and families in crisis, and helping children cope with the future.

ECE 6625, 6626, 6627 Specialized Study in Early Childhood Education (1-3)
 A study of a problem using research techniques. Selection of problem must be approved by the professor under whom the study is to be made and the Dean of Education. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.

ECE 6628 Inquiries into Literacy Acquisition (3)
 This course is designed to explore emergent literacy and the role of developmentally appropriate practices for young children, N-3. The course includes emphasis on: role of the teacher and teaching reading to young children, children and multiple learning styles, the reading process, and developing a developmentally appropriate reading program for young children, N-3.

ECE 6630 Inquiries into Representation (3)
 This course is designed to assist graduate students as they investigate and construct knowledge of symbolic representation in all of its form. Topics include: children's talk, play, art, writing process, music, movement and construction.

ECE 6631 Historical Perspectives in Early Childhood Education (3)
 The purpose of this course is to assist graduate students in constructing a sense of identity with the field of early childhood education through an understanding of the past as a prologue to contemporary thought and practice. The philosophy, history, and impact of education from the time of Plato to the present will be examined with special emphasis on the major influences in early childhood education.

ECE 6632 Authentic Assessment in the Early Childhood Classroom (3)
 The purpose of this course is to explore the investigation and evaluation of teaching and learning in the early childhood education program through the use of human and material resources. Purposes, types, and designs for developmentally appropriate evaluation will be examined.

ECE 6633 Integrated Thematic Curriculum (3)
 The purpose of this course is to assist graduate students as they construct an operational knowledge of integrated thematic curriculum. The course will focus on theory, planning, implementation, and evaluation of an integrated thematic curriculum. Additionally, issues surrounding the implementation of innovative teaching methodology in traditional settings will be examined.

ECE 6634 Inquiries into Logico-Mathematical Knowledge (3)
 The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding about their own questions related to young children's construction of logico-mathematical knowledge and the facilitation and evaluation of that knowledge construction in the early childhood classroom. In addition, the students will interact with young children through observation and participation in the application of appropriate logico-mathematical knowledge experiences and the investigation and evaluation of children's construction of knowledge.

ECE 6635 Program Evaluation in Early Childhood (3)
 This course is designed for the education student to examine evaluation in early childhood and elementary education programs. Techniques and procedures concerning the design and implementation of evaluation in the total school program will be investigated.

ECE 6640 Integrating Children's Literature (3)
 The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding of and develop techniques to incorporate quality children's literature across the curriculum. Pertinent topics include award winning authors and titles found in children's literature among a variety of genre, along with developmentally appropriate techniques for focusing curriculum delivery through quality children's literature.

ECE 6674 Early Childhood Internship Grades P-3 (6)
 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.

ECE 7725 Specialized Study in ECE (1-3)
 A study of the problem using research techniques. Selection of problem must be approved by the professor under whom the study is to be made, and the Dean of Education. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.

ECE 7760 Leading for Learning in the School Environment (3)
 This course is designed to extend the teacher leader from the classroom to the school environment. Students will be provided a study of the processes involved in evaluating school settings and the problems faced by instructional leaders. Major emphasis will be placed on the transition to a teacher leading in the school environment. Characteristics of leading for learning will be explored. Topics that affect today's teacher leaders and positive ways to deal with instructional issues will also be investigated.

ECE 7761 Effective Schools and Teachers (3)
 This course is designed to examine the knowledge base for effective schools to enable teacher leaders to develop skills in their own practices. There will be emphasis through in-depth study of the research literature on effective school settings. Students will critically examine, analyze, and evaluate the components and characteristics of effective school environments.

ECE 7762 School Accreditation Process (3)
 The purpose of this course is to examine the local, state, regional, and national standards associated with school accreditation. The accreditation process in these areas will be reviewed and analyzed. Students will compare and contrast the different ways schools are accredited. Topics such as: the accreditation process, school self-study procedures, validation/documentation, roles of school personnel, and creating school improvement plans will be investigated.

ECE 7763 Legal Issues and Ethics in Education (3)
 The purpose of this course is to allow educa-

tional leaders to explore the organizational development and maintenance services required for effective operation of the schools within the legal framework established by local, state, and federal legislative and judicial requirements. Major emphasis will be given to studying legal issues and community relations. Legal issues and services related to exceptional children will be closely examined. The development of ethical standards, informed legal decision making, and emergency procedures for ensuring safety, as well as the political factors which impact schools, society and community relations will be studied.

ECE 7790 Qualitative Research Methodology (3)
 The purpose of this course is to provide graduate students with an introduction to qualitative research methodology. The historical development, rationale, and relationship to quantitative research will be examined. Qualitative research methods will include procedures for selection and sampling and for data collection and analysis. Students will read a variety of qualitative studies and conduct a brief qualitative research project. *Prerequisite: course in research or tests and measurement*

ECE 7793 Problem Analysis in ECE (3)
 A study of processes involved in identifying, framing, evaluating analyzing, and seeking information about problems. Emphasis is given to information collection and processing. Students will select and analyze a problem related to early childhood education or elementary education. *Restricted to students enrolled in an Education Specialist program.*

ECONOMICS

ECO 6654 Labor Economics (3)
 An overview of the forces of supply and demand as related to labor markets; wage determination and resource allocation in U.S. labor market operations; the interrelationship of labor and the national economy, wages, prices, and employment; and labor economics in the microenvironment. An introduction to wage determination policies and strategies in a competitive global marketplace.

ECO 6655 Managerial Economics (3)
 Integration of various principles and concepts from different fields of business with primary emphasis on problems of economic decision making and policy formulation at the individual firm and industry levels.

ECO 6657 International Trade and Economics (3)
 Principles and problems of international economics, trade theory, international pay-

ments, and monetary policies, economic integration, international economic institutions and policies, and contemporary developments in political economy.

GIFTED EDUCATION

EDG 6666 Nature and Needs of Gifted Individuals (3)

This foundation course in the study of gifted education and talent development focuses on understanding gifted individuals, assessment and identification issues in finding gifted students in the schools, models often used to provide education for gifted students and developing support systems for programs for gifted learners.

EDG 6667 Creativity (3)

This course in creative thinking in gifted education focuses on understanding creativity and creative students. This course emphasizes the importance of helping children and adolescents become more self-actualized, creative individuals to better enable them to make important contributions to society. *Prerequisite: EDG 6666 Nature and Needs of Gifted Individuals*

EDG 6668 Integrating Thinking Skills into the Curriculum (3)

The focus of this course is the integration of critical and productive thinking skills into the curriculum for gifted learners. This course emphasizes an inquiry-based approach to differentiation of the curriculum content for gifted learners. *Prerequisite: EDG 6666 Nature and Needs of Gifted Individuals.*

EDG 6669 Teaching Methods in Gifted Education (3)

This methods course in curriculum development in gifted education focuses on planning, designing, and developing appropriate curriculum for gifted students. This course emphasizes the connection between the needs of gifted learners and the cognitive, affective, social, and aesthetic areas of curriculum experiences. *Prerequisites: EDG 6666 Nature and Needs of Gifted Individuals, EDG 6667 Creativity, and EDG 6668 Integrating Thinking Skills into the Curriculum.*

EDG 6670 Special Populations of Gifted Students (3)

This course examines ways in which teachers can identify and plan for gifted children from special and underrepresented populations with particular emphasis on underachieving students, minority students, and students with physical, emotional, and learning disabilities. *Prerequisite: EDG 6666 Nature and Needs of Gifted Individuals.*

EDG 6696 Practicum in Gifted Education (3)

Supervised experiences related to instruction in gifted education. The application of skills, concepts, and principles acquired in previous courses will be emphasized. *Prerequisite: At least six hours in teaching field component and a research course must be completed.*

EDUCATIONAL LEADERSHIP

See Educational Administration (EAL) or Higher Education Administration (HEA)

EDUCATION

EDU 6600 Classroom Management and Behavior Intervention (3)

This course is a study of current theory, research, and practice in psychology, sociology, leadership, and human behavior as related to school age students, the nature of the educational organization, and the role of the teacher in that organization. Emphasis is placed upon the formation of a positive, developmental philosophy for effective management of classroom resources and student behavior as well as the identification of some appropriate methods and techniques to apply this philosophy

EDU 6603 Planning For the Classroom (3)

This course provides students with an overview of the K-12 classroom environment and the planning necessary to establish environments that are conducive for learning.

EDU 6605 Computer-Based Instructional Technologies (3)

This is an advanced survey course in those classroom adaptable technologies, which are associated with the personal computer. Emphasis is placed on familiarity with keyboarding, disk operating systems, and tool software. Proficiency with word processing, data base and spreadsheet in an integrated program is developed. Students present a lesson augmented with an electronic slide show produced during the course.

EDU 6606 Current and Emerging Instructional Technologies (3)

This course focuses on the current and emerging uses of technology in the classroom, including electronic equipment for telecommunications, networking, online services, the internet, e-mail, list server, telenetting, and user groups, and the uses and hazards of involving these technologies in teaching.

EDU 6607 Curriculum Integration of Technology (3)

This course covers evaluation, selection, and

- integration of educational software into elementary and secondary education curricula, taking into consideration teaching and learning styles while relating technologies to various disciplines, diverse models, and developmental levels. Microlessons are produced using multimedia-authoring tools. *Prerequisite: EDU 6606*
- EDU 6611 Educational Technology in the Curriculum (3)**
The purpose of this course is to advance pre-service and in-service teachers beyond simple computer literacy and basic understanding of Computer-Based Instructional Technologies. It will focus on more advanced educational use of multimedia and Internet based technologies. The student will explore technologies and learning tools that foster a more learner centered constructivist environment within their specific teaching area. Critical issues arising from the integration of these technologies such as development of interactive environments and new modes of communication and subsequent effects on the definition of learning will also be investigated. *Prerequisites: undergraduate or graduate technology course or placement exam*
- EDU 6613 Principles of Instructional Design (3)**
This course focuses on the development of instruction by using the instructional design process to develop online or electronic instructional materials. The systematic design of instruction will serve as the foundation for the development of such materials. The students will develop the necessary pedagogical and technological skills that will facilitate the design and development of instruction using the appropriate tools. *Prerequisite: EDU 6605*
- EDU 6614 Advanced Instructional Design (3)**
This course will further expose students to the pedagogies, design processes, and technology-related tools that will facilitate proficiency in the development of online or electronic instructional materials. Attention will be paid to using advanced tools and techniques to develop strategies and materials that will focus on the cognitive needs of the learner. *Prerequisite: EDU 6605*
- EDU 6616 Distance Learning Strategies (3)**
A study of various forms of distance learning with emphasis on computer based systems and on-line learning. The course integrates relevant technology including multimedia authoring, web design, and internet delivery systems. The course concentrates on the development of web-based instructional materials and the management of internet-based courses and programs. Students design an educational web site and
- develop a strategy to deliver web-based instruction. *Prerequisite: EDU 6605, 6606, 6607 or permission of the instructor*
- EDU 6617 Graphic Design in Multimedia Instruction (3)**
A study of graphic design principles as they apply to the development of multimedia instructional courseware. The course integrates advanced graphics, multimedia authoring and web design software to teach the student relevant technology as it applies to instructional design. Students apply graphic design principles in developing a variety of multimedia instructional products working individually and in teams. *Prerequisite: EDU 6605, 6606 or permission of the instructor*
- EDU 6618 Advanced Multimedia Production (3)**
An advanced course in computer based multimedia interactive course design. The course integrates course design software, multimedia authoring, web design and presentation graphics in the development of a multimedia lesson or course. The course concentrates on the total instructional process culminating complete multimedia class delivered either by disk or internet. Students develop their own video and audio elements learning the complete production process necessary for multimedia instructional products. *Prerequisite: EDU 6605, 6606, 6607 or permission of the instructor*
- EDU 6625, 6626, 6627 Specialized Study in Area of Education (1-3)**
This course focuses on the study of a problem or problems using research techniques. Selection of the problem must be approved by the student's adviser, the instructor under whom the study is to be made, the appropriate college dean, and the Dean of the Graduate School. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed 4 semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- EDU 6629 The Master Teacher (3)**
This course is designed to assist the beginning graduate student in determining the expectations and attributes of the master teacher. Major emphasis will focus on effective teacher characteristics, skills and practices of teaching, as well as a review of the requirements for National Board for Professional Teaching Standards (NBPTS). All traditional masters degree teacher education candidates must complete this course in

- the first nine semester hours attempted. Formal admission to Graduate Teacher Education Program (GTEP) will be completed as a part of the course.
- EDU 6630 Teachers and the Law (3)**
This course is designed to help teachers become legally literate by providing them with information about the law that affects them, how the legal system works, and how that system can work for them.
- EDU 6632 Seminar in Classroom Teaching (2)**
This course is an inter-disciplinary seminar course designed for classroom teachers who desire to investigate in depth the techniques, procedures and strategies related to improving learning through improved teaching.
- EDU 6645 The Nature of Intelligence (3)**
This course provides a description and analysis of the quantitative and qualitative aspects of intelligence. It includes classic and contemporary theories of learning and their relationship to the understanding of individual differences.
- EDU 6650 Global Education in the Elementary/Middle School (3)**
This course is designed to instruct teachers about the complexities of citizenship in a world community, current issues, and concerns in this field, and methods of globalizing the existing elementary curriculum.
- EDU 6653 Educational Evaluation (3)**
A study of the basic statistical processes and measures used in education. Analysis of a variety of standardized tests and measurements procedures including construction, use and interpretation. Construction of teacher made tests and measuring devices.
- EDU 6655 The Arts Curriculum (3)**
This course prepares the teacher to provide a broad-based arts education program that includes history, interpretation, production, and appreciation. Emphasis is placed on utilizing the arts to enrich students learning in all curricular areas.
- EDU 6656 Teaching the Bilingual Child (3)**
This course prepares teachers to make classroom and instructional accommodations to meet the needs of the bilingual child. It also addresses facilitating home-school partnerships with families of bilingual children.
- EDU 6658 Understanding Cultural Diversity (3)**
Understanding of culturally different studies, the psychological and sociological factors that influence the counseling, teaching or training, and the employment of the culturally different. Special emphasis is placed on current practices utilized in overcoming the deficiencies in school, home, and work settings.
- EDU 6680 The Alternative Experience Internship Grades K-6 (3)**
This field experience is designed only for students who are admitted to the Alternative Fifth-Year Experience Route Program in Elementary Education. The internship will consist of a minimum of 100 clock hours of instructional experiences in elementary classroom (K-6) settings.
- EDU 6682 Internship in Area of Specialization (3)**
This field experience is designed for teacher education candidates who hold current graduate-level professional educator certification and desire additional certification in another field and/or level. Experiences include planning, teaching and supervised activities in an approved clinical setting. Prerequisite: Admission to the Teacher Education Program, completion of all required coursework, and approval from the Director of Teacher Education.
- EDU 6691 Research Methodology (3)**
This course is a study and evaluation of a variety of research methods and types of reporting. (May carry the prefix appropriate to the program of study i.e. SPE, SED, IED). A grade of "B" or better is required.
- EDU 6693 Quantitative Methods of Evaluation of Teaching and Learning (3)**
This course is a study of descriptive and inferential statistics commonly used in the literature of psychology and education. Emphasis is placed on the application of statistical method to research design. Instruction deals specifically with measures of central tendency and variability, probability theory, estimation and significance, correlation and regression, analysis of variance, and chi-square.
- EDU 6695 Thesis (3)**
The thesis must be related to an educational problem or situation. Information regarding the thesis program may be obtained from the Dean of the Graduate School. This course may be repeated. Pass/Fail.
- EDU 6696 Practicum in Area of Specialization (1-6)**
The Practicum is supervised experiences related to instruction in area of specialization. The application of skills, concepts, and principles acquired in previous courses will be emphasized. *Prerequisite: All Teaching Field courses must be completed.*
- EDU 6698 Introduction to Research (3)**
This course is designed to assist graduate students as they become competent consumers and producers of educational research. Purposes, designs, and characteristics of quantitative and qualitative research will be examined as students read and analyze a variety of studies.

- EDU 6699 Research in Practice (3)**
The purpose of this course is to provide graduate students with an opportunity to design, implement, and write about quantitative or qualitative research related to their own teaching. *Prerequisite: EDU 6698 or EDU 6653*
- EDU 7706 Environmental Education: Teaching Across the Curriculum (3)**
This course is designed to provide an interdisciplinary experience in teaching using an approach designed around environmental education themes. The graduate students will be immersed in teaching across the curriculum using issues related to the environment. The focus will be interdisciplinary and utilize hands-on learning experiences which will help to make learning meaningful and authentic.
- EDU 7709 Seminar in Decision-Making for Teachers and Educational Administrators (3)**
The purpose of this course is to critically examine, analyze, and evaluate American public education in order to frame problems, identify possible causes, seek and collect information, delineate steps to solutions, and generate possible solutions to problems facing schools today. Particular focus will be given to curriculum and instruction, financial, political, cultural, economic ethical and legal policies, and the impact of cultural diversity in American schools. Restricted to students enrolled in an Education Specialist program.
- EDU 7725, 7726, 7727 Specialized Study in Education (1-3)**
Study of the problem using research techniques. Selection of problem must be approved by the professor under whom the study is to be made, and the Dean of Education. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- EDU 7730 The Teacher Leader (3)**
The purpose of this course is to help teachers develop as teacher leaders in their schools. Major emphasis will focus on teacher leader characteristics, skills and effective practices in teacher leadership.
- EDU 7750, 7752, 7757 Practicum in Area of Specialization (1-3)**
The Practicum is a supervised application of the concepts, principles, and skills acquired
- by the students in previous course work. Students will explore and identify alternative solutions to the problems through group interaction.
- EDU 7760 Leading for Learning in the School Environment (3)**
This course is designed to extend the teacher leader from the classroom to the school environment. Students will be provided a study of the processes involved in evaluating school settings and the problems faced by instructional leaders. Major emphasis will be placed on the transition to a teacher leading in the school environment. Characteristics of leading for learning will be explored. Topics that affect today's teacher leaders and positive ways to deal with instructional issues will also be investigated.
- EDU 7761 Effective Schools and Teachers (3)**
This course is designed to examine the knowledge base for effective schools to enable teacher leaders to develop skills in their own practices. There will be emphasis through in-depth study of the research literature on effective school settings. Students will critically examine, analyze, and evaluate the components and characteristics of effective school environments.
- EDU 7762 School Accreditation Process (3)**
The purpose of this course is to examine the local, state, regional, and national standards associated with school accreditation. The accreditation process in these areas will be reviewed and analyzed. Students will compare and contrast the different ways schools are accredited. Topics such as: the accreditation process, school self-study procedures, validation/documentation, roles of school personnel, and creating school improvement plans will be investigated.
- EDU 7763 Legal Issues and Ethics in Education (3)**
The purpose of this course is to allow educational leaders to explore the organizational development and maintenance services required for effective operation of the schools within the legal framework established by local, state, and federal legislative and judicial requirements. Major emphasis will be given to studying legal issues and community relations. Legal issues and services related to exceptional children will be closely examined. The development of ethical standards, informed legal decision making, and emergency procedures for ensuring safety, as well as the political factors which impact schools, society and community relations will be studied.
- EDU 7764 Models and Strategies for Instruction (3)**
The purpose of this course is to assist education specialist candidates as they explore a

variety of instructional models throughout the educational and other learning environments. There will be an emphasis on current research of effective teaching and learning practices. Students will compare and contrast different educational instructional practices and develop set of strategies to enhance the instructional environment.

EDU 7792 Advanced Research in Education (3)
 This course is designed primarily for students planning to prepare a thesis. Particular attention is given to the research techniques related to the types of thesis study the student desires to undertake. (May carry the prefix appropriate to the program of study i.e. SPE, SED, IED). *Prerequisite: This course is restricted to Ed.S. candidates only.*

EDU 7795 Thesis (1-3)
 Research for and preparation of a scholarly paper related to a school administration, supervision, and/or curriculum problem. The project will be under the direction of the student's advisory committee.

EDU 9972 The Wiregrass Writing Project (3)
 The Wiregrass Writing Project is the local affiliate of the Alabama Writing Project and the National Writing Project. The National Writing Project strives to improve student writing achievement by improving the teaching and learning of writing in the nation's schools. The 165 sites operate on a teachers teaching teachers model. Successful writing teachers who attend this invitational summer institute will examine their classroom practice, conduct research of sound theory supporting particular approaches to the teaching of writing, and develop their own writing skills.

ELEMENTARY EDUCATION

ELE 5544 Internship Seminar (3)
 This course provides interns an opportunity to develop analytical thinking skills through examining 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. This course must be taken concurrently with internship.

ELE 6600 Diagnostic Approach to Teaching Mathematics (3)
 The diagnostic/prescriptive component of teaching mathematics will be studied with an emphasis on the interpretation of diagnostic materials

ELE 6601 The Art of Teaching Writing (3)
 Course in which classroom teachers investigate and apply the art of teaching writing via whole language/natural approach. Focus on writing process.

ELE 6602 Seminar in Mathematics Education (3)
 This course will look at recent research and publications relative to the teaching of elementary school mathematics. Not only will specific areas selected by the instructor be examined, but the students in the class will have the opportunity to suggest areas of particular interest to them. This course provides opportunities for the student to extend knowledge and skills necessary for developing programs, selecting appropriate methods and employing materials, and evaluating in mathematics instruction, kindergarten through grade 6.

ELE 6603 Seminar in Science Education (3)
 This course will examine relevant research and a variety of instructional strategies appropriate in the field of natural science. Emphasis is placed on appropriate instruction and materials including technology for teaching science to students in grades K-6.

ELE 6604 Seminar in Language Arts Education (3)
 This course is a seminar for elementary educators desiring to design and implement developmental programs of language arts instruction in view of recent research. An examination of the research in the language arts and current practices in teaching techniques will be pursued.

ELE 6605 Seminar in Social Science Education (3)
 This course will examine relevant research and a variety of instructional strategies appropriate in the field of social science. Emphasis is placed on appropriate instruction and materials including technology for teaching social science to students in grades K-6.

ELE 6622 Parents as Partners in Education (3)
 The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding of and develop techniques to strengthen the school-parent relationship while developing mutual supporters for the total development of the young child. Pertinent topics include: stress and children, parents and families in crisis, and helping children cope with the future.

ELE 6625, 6626, 6627 Specialized Study in Elementary Education (1-3)
 A study of a problem using research techniques. Selection of problem must be approved by the professor under whom the

- study is to be made and the Dean of Education. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- ELE 6633 Integrated Thematic Curriculum (3)**
The purpose of this course is to assist graduate students as they construct an operational knowledge of integrated thematic curriculum. The course will focus on theory, planning, implementation, and evaluation of an integrated thematic curriculum. Additionally, issues surrounding the implementation of innovative teaching methodology in traditional settings will be examined.
- ELE 6635 Program Evaluation in Elementary Education (3)**
This course is designed for the education student to examine evaluation in early childhood and elementary education programs. Techniques and procedures concerning the design and implementation of evaluation in the total school program will be investigated.
- ELE 6640 Integrating Children's Literature (3)**
The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding of and develop techniques to incorporate quality children's literature across the curriculum. Pertinent topics include: award winning authors and titles found in children's literature among a variety of genre, along with developmentally appropriate techniques for focusing curriculum delivery through quality children's literature.
- ELE 6674 Elementary Internship Grades K-6 (6)**
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.
- ELE 7725, 7726, 7727 Specialized Study in Elementary Education (1-3)**
A study of the problem using research techniques. Selection of problem must be approved by the professor under whom the study is to be made, and the Dean of Education. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- ELE 7736 Mentoring and Supervision in ELE (3)**
This course is designed for the advanced sixth year education student to examine the faculty leadership roles of mentor/supervisor in ELE settings. Techniques and procedures will be investigated.
- ELE 7760 Leading for Learning in the School Environment (3)**
This course is designed to extend the teacher leader from the classroom to the school environment. Students will be provided a study of the processes involved in evaluating school settings and the problems faced by instructional leaders. Major emphasis will be placed on the transition to a teacher leading in the school environment. Characteristics of leading for learning will be explored. Topics that affect today's teacher leaders and positive ways to deal with instructional issues will also be investigated.
- ELE 7761 Effective Schools and Teachers (3)**
This course is designed to examine the knowledge base for effective schools to enable teacher leaders to develop skills in their own practices. There will be emphasis through in-depth study of the research literature on effective school settings. Students will critically examine, analyze, and evaluate the components and characteristics of effective school environments.
- ELE 7762 School Accreditation Process (3)**
The purpose of this course is to examine the local, state, regional, and national standards associated with school accreditation. The accreditation process in these areas will be reviewed and analyzed. Students will compare and contrast the different ways schools are accredited. Topics such as the accreditation process, school self-study procedures, validation/documentation, roles of school personnel, and creating school improvement plans will be investigated.
- ELE 7763 Legal Issues and Ethics in Education (3)**
The purpose of this course is to allow educational leaders to explore the organizational development and maintenance services required for effective operation of the schools within the legal framework established by local, state, and federal legislative and judicial requirements. Major emphasis will be given to studying legal issues and community relations. Legal issues and services

related to exceptional children will be closely examined. The development of ethical standards, informed legal decision making, and emergency procedures for ensuring safety, as well as the political factors which impact schools, society and community relations will be studied.

ELE 7790 Qualitative Research Methodology (3)
 The purpose of this course is to provide graduate students with an introduction to qualitative research methodology. The historical development, rationale, and relationship to quantitative research will be examined. Qualitative research methods will include procedures for selection and sampling and for data collection and analysis. Students will read a variety of qualitative studies and conduct a brief qualitative research project. *Prerequisite: course in research or tests and measurement*

ELE 7793 Problem Analysis in ELE (3)
 A study of processes involved in identifying, framing, evaluating analyzing, and seeking information about problems. Emphasis is given to information collection and processing. Students will select and analyze a problem related to early childhood education or elementary education. Restricted to students enrolled in an Education Specialist program.

**EXECUTIVE MASTER OF BUSINESS
ADMINISTRATION**

EMBA 5501 Survey of Business Concepts (3)
 An overview course of the business management field including the functional areas of accounting, economics marketing, finance, human relations and human resource management. Must be completed as a prerequisite by all students as a condition of entrance in the EMBA program. (Prerequisite course to EMBA program; not for credit in other degree programs) Student must earn a "B" grade or better.

EMBA 6603 Human Resource Management (3)
 An overview of recruitment, selection, training, retention, compensation, and termination of employees and the relationship of an HR strategy to the strategic and operational roles of general managers.

EMBA 6611 Business Strategy (3)
 This course is the capstone course in the EMBA program. It integrates the skills and knowledge developed in earlier courses and emphasizes case analysis. Formulation and implementation of strategies are stressed. The course includes an end-of-course comprehensive examination. A grade of "B" or better is required to complete this course successfully. The course may not be transferred into the EMBA program. *Prerequisite:*

Completion of a minimum of 27 semester hours in the EMBA program, with a "B" average or better, including the following courses: ACT 6691, MBA 6651, MBA 6631, MBA 6661 and MBA 6642; or approval of the department chair. Students should be in the last term of their program when completing this course.

EMBA 6625 Specialized Study in the Area of EMBA Concentration (3)
 A study of problem or problems using research techniques. Selection of the problem must be approved by the student's adviser, the instructor under whom the study is to be made, and the appropriate dean or site director. Preparation of an applied research paper is required and may involve an oral defense. See semester hour limits listed under Course Restrictions in General Regulations section.

EMBA 6631 Managerial Finance (3)
 A comprehensive and advanced study of financial analysis, planning, and control techniques for a business entity with emphasis on corporations.

EMBA 6640 Quantitative Analysis for Managers (3)
 This course provides an in-depth study of the fundamental theories, concepts, and principles of statistics. Coursework will include extensive use and application of statistical tools to analyzing business data using statistics software. Topics covered include descriptive statistics, probability distributions, sampling, estimation, hypothesis testing, ANOVA and regression analysis.

EMBA 6641 Decision Theory (3)
 An analysis of the probabilistic and deterministic quantitative techniques available to the business manager involved in the decision making process of the market place. Included is an evaluation of the models and processes now available for problem-solving purposes.

EMBA 6651 Managerial Economics (3)
 A study of the decision-making process of business firms in the resource allocation process. Both the functioning of markets and the decisions of firms in a variety of market structures are considered. Various theories of the firm are used to study the optimal decision-making rules for business firms under conditions of uncertainty.

EMBA 6661 Strategic Marketing Management (3)
 An application of marketing concepts, principles and procedures for planning, development, implementation and control of marketing programs in profit and non-profit organizations. Emphasis is on the matching of organization resources and strengths with global marketing opportunities, and strategies to overcome environmental threats.

EMBA 6671 Organizational Behavior (3)
A study of contemporary concepts and theories of organization and the behavior of individuals and groups applied to organizations in the global business environment.

EMBA 6673 Operations Management (3)
An analysis of the conditions under which production and management of goods and services take place in business organizations with attention to the delineation of roles played by management and labor in carrying out production and application of selected quantitative techniques used in production.

EMBA 6674 Ethics in Business (3)
The course examines ethical problems and issues faced by managers in the American business and industry with attention to analyzing issues and developing recommended approaches to increase long-term organizational effectiveness.

ENGLISH

ENG 5501 Chaucer (3)
A study of Chaucer's major poetry.

ENG 5502 Studies in Medieval Literature (3)
A study of non-Chaucerian British literature from the Middle Ages, including *Beowulf*, *Piers Plowman*, *Sir Gawain and the Green Knight*, mystery plays, *Le Morte d'Arthur*, and other works.

ENG 5503 English Renaissance Literature (3)
This course covers English prose and poetry of the 16th and early 17th centuries, with emphasis on Sidney, Spenser, Donne, and Jonson.

ENG 5504 Milton (3)
A study of Milton's poetry and major prose.

ENG 5505 History of the English Language (3)
A study of the development of English from the Anglo-Saxon period through the present, with reference to the Indo-European background of English.

ENG 5513 Modern Short Story (3)
An examination of 20th- and 21st-century short stories.

ENG 5515 Modern Drama (3)
A detailed study of selected British and/or American plays written between 1900 and present. Review of production history, subject matter, staging, and dramatic techniques. Several oral and written reports. List of plays may vary with each offering.

ENG 5516 Nineteenth-Century American Novel (3)
A study of representative American novels of the 19th century.

ENG 5526 Modern Poetry (3)
A study of 20th- and 21st-century poetry.

ENG 5527 Contemporary American Literature (3)
An examination of representative American literature from the postmodern period (1960-present), with special emphasis on the diversity of themes, styles, and cultural contexts influencing the literary marketplace. Course readings may vary with each offering.

ENG 5528 The Age of Johnson (3)
A study of the works of Samuel Johnson and his most important contemporaries, from about 1745 to 1798.

ENG 5530 Shakespeare I: The Tragedies (3)
A study of major and minor tragedies, with some attention to non-dramatic poetry. List of plays may vary with each offering.

ENG 5531 Shakespeare II: The Comedies (3)
A study of comedies and romances. List of plays may vary with each offering.

ENG 5532 Shakespeare III: The Histories (3)
A study of history plays, especially those concerning Wars of the Roses. List of plays may vary with each offering.

ENG 5533 Literary Criticism (3)
A study of the major literary critics and their works from classical times to the present.

ENG 5534 Romantic Period in English Literature (3)
A study of Romantic prose and poetry with emphasis on the writings of Blake, Coleridge, Wordsworth, Byron, Keats, and Shelley.

ENG 5542 Advanced Writing (3)
An intensive study of and practice in expository and argumentative prose. Requires writing several essays. Some evaluation of other students' writing.

ENG 5543 Southern Writers (3)
A study of works by writers from the American South from colonial times to the present.

ENG 5552 Medieval and Renaissance English Drama (3)
A survey of drama from the Middle Ages and Renaissance, excluding Shakespeare. Begins with brief study of folk and liturgical origins of drama, includes a few medieval mystery and morality plays, and features Renaissance plays by Heywood, Udall, Kyd, Marlowe, Beaumont, Fletcher, Jonson, and Webster.

ENG 5557 Form and Theory of Nonfiction Literature (3)
This course examines the theories behind various forms of nonfiction literature, whether autobiography, biography, the es-

- say, diaries and/or travel writing, with special emphasis on the historical evolution of a particular form. List of readings will vary with each offering.
- ENG 5560 **Victorian Poetry (3)**
A study of Victorian poetry, with emphasis upon the works of Tennyson, Browning, Arnold, and Hardy.
- ENG 5561 **Victorian Prose (3)**
A survey of the works of major Victorian prose writers, with emphasis upon the works of Carlyle, Newman, Mill, Ruskin, Arnold, and Pater.
- ENG 5562 **The Arthurian Legend Through the Ages (3)**
This course will examine the Arthurian legend 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, music, and opera.
- ENG 5565 **African American Literature (3)**
A study of selected works by significant African American writers from the eighteenth century to the present. Works include poetry, fiction, autobiography, and argumentative and expository prose.
- ENG 5568 **Methods and Approaches in Second Language Teaching (3)**
This course traces the evolution of language teaching from the methods era (e.g., grammar translation method, audiolingual method) to post-methods approaches (e.g., task-based learning, content-based learning, communicative approaches). Students will develop a repertoire of teaching approaches and identify appropriate options for different language teaching scenarios.
- ENG 5569 **Principles, Techniques, and Materials in Second Language Teaching (3)**
This course overviews the teaching principles, techniques, and materials relevant to an interactive approach to second language teaching. Students will expand their teaching repertoire by studying curriculum design, assessment measures, learner variables, techniques for teaching grammar/vocabulary/four skills (listening, speaking, reading, writing), and sociopolitical contexts for teaching ESL/EFL.
- ENG 5570 **Advanced Survey of Speech (3)**
This course provides a survey of speech. Explores the impact, purpose, occasion, and audience on written and spoken discourse, and effective listening techniques. Explains theory and techniques of group discussion, directive communication, storytelling, and argument.
- ENG 5571 **Advanced Survey of Journalism (3)**
This course provides a survey of journalism techniques. Explains the style of writing used in different news media, the types of news stories and how they are written, the editing process, the production of print and non-print journalistic media, and the ethical responsibilities of newsgathering organization and reporters.
- ENG 5572 **Advanced Survey of Drama (3)**
This course provides a survey of theater. Explains the history of the theater and the roles of the playwright, director, actors, and technicians.
- ENG 6601 **Seminar in Chaucer (3)**
A close examination of two major works of Chaucer and critical responses to them. Special consideration given to Chaucer's language and versification and the medieval social background to his writing.
- ENG 6603 **Seminar in Shakespeare (3)**
A study of selected tragedies or comedies. Examination of various critical approaches. Extensive reading in relevant criticism. List of plays, as well as genre, may vary with each offering.
- ENG 6605 **Linguistic Approaches to Grammar (3)**
Study of American English from point of view of modern linguistic theories. Special consideration given to structural grammar and its possibilities in classroom.
- ENG 6606 **Theory and Practice of Analyzing Poetry (3)**
A critical study of representative types of poetry, employing several approaches in analytical process.
- ENG 6607 **The Backgrounds of Victorian Literature (3)**
A study of Victorian literature (1837-1900) as it reflects social, economic, political, educational, aesthetic, and religious concerns.
- ENG 6608 **Shakespeare's History Plays (3)**
A study of eight plays, from *Richard II* to *Richard III*, concerning the Wars of the Roses. Supplemental reading in Shakespeare's sources and in twentieth- and twenty-first-century histories.
- ENG 6609 **The Backgrounds of Nineteenth-Century American Literature (3)**
A study of literature (fiction, nonfiction prose, and poetry) as it reflects key issues, ideas, concerns, problems, and trends of the period. May be taught in conjunction with a course in American history.

- ENG 6610 The Backgrounds of Twentieth-Century American Literature (3)**
A study of literature (fiction, nonfiction prose, poetry, and drama) as it reflects key issues, ideas, concerns, problems, and trends of the period. May be taught in conjunction with a course in American history.
- ENG 6613 Theory and Practice of Analyzing the Short Story (3)**
A critical study of representative types of short stories employing theoretical approaches in the analytical process.
- ENG 6617 Dramaturgy I (3)**
A study of selected classical, period, and contemporary plays (list may vary with each offering). Emphasis on dramatic form, historical perspectives, staging, and production.
- ENG 6618 Dramaturgy II (3)**
Study of additional classical, period, and contemporary plays (list may vary with each offering). Emphasis on dramatic techniques, character development, directing, staging, and production.
- ENG 6620 Seminar in Restoration and 18th Century Literature (3)**
A study of English prose and poetry in the Restoration and early 18th century, with emphasis on Dryden, Behn, Swift, and Pope.
- ENG 6625-6627 Specialized Study in Area of English (1-4)**
A study of problem or problems using research techniques. Selection of problem to be approved by student's adviser, instructor under whom study is to be done, and director of graduate studies. Study should contribute to student's program. Preparation of scholarly paper required and may involve oral defense. Total credit for any combination of enrollments in these courses not to exceed four semester hours. A specialized study may be substituted for a required course only one time in student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- ENG 6630 Survey of SLA for Second Language Teachers (3)**
SLA is the study of how language, social, and psychological factors influence language learning. A range of SLA topics are addressed from the perspective of language teaching: theories of human learning, theories of language acquisition, learning styles and strategies, communicative competence, cross-linguistic influences, and sociocultural factors.
- ENG 6631 Survey of Sociolinguistics for Second Language Teachers (3)**
Sociolinguistics is the study of how social, political, and educational factors affect language use. A range of Sociolinguistics topics are addressed from the perspective of language teaching: literacy, world Englishes, language standardization, language variation and change, multilingual education, language planning and policy, group identity/morality, and regional/social dialects.
- ENG 6632 American Realism and Naturalism (3)**
A seminar stressing critical approaches to the major works of such writers as James, Howells, Twain, Crane, and Dreiser.
- ENG 6635 The Victorian Novel (3)**
The study of the content and techniques of representative novels of the period with some consideration of these novels in relation to significant social, philosophical, and literary needs.
- ENG 6636 The American Renaissance (3)**
A seminar stressing critical approaches to the major works of Emerson, Thoreau, Hawthorne, Melville, Poe, and Whitman.
- ENG 6638 Major American Writers: WWI to Present (3)**
A study of major American writers who represent the various currents in American literature and thought from 1917 to present.
- ENG 6641 Theory and Practice of Grammar Studies (3)**
Advanced studies in descriptive grammar in conjunction with sentence structure and standards of usage. Special emphasis upon current procedures for presenting the various systems of grammar (particularly structural).
- ENG 6642 Theory and Practice of Written Composition (3)**
Advanced studies in expository and argumentative writing. Special emphasis upon procedures for presenting methods for organizing and developing various types of essays.
- ENG 6643 Trends in Children's and Young Adult Literature (3)**
A study of literature at the elementary, middle, and senior high levels. It includes reading the primary sources and studying the research and theory that support the use of children's and young adult literature in the classroom.
- ENG 6648 Studies in the American Renaissance (3)**
A study of the major works of the American Renaissance.
- ENG 6651 Studies in Modern Novel (3)**
A study of selected American, British, and/or European novels of the modern age.

ENG 6660 Introduction to Applied Linguistics (3)
 This course introduces the main content areas and research practices of Linguistics and Applied Linguistics. Linguistics involves the systems of a language (phonology, morphology, syntax, semantics). Applied Linguistics requires familiarity with these systems for the purpose of researching and teaching the way language is used (e.g., Sociolinguistics, Second Language Acquisition).

ENG 6665 Studies in African American Literature (3)
 A study of major works by African American writers.

ENG 6670, 6671, 6672 Seminar in Selected Topics (3)
 Maximum of two semesters. Study of topic of special interest and importance which is not covered in regularly offered courses for advanced graduate students. See semester hour limits listed under Course Restrictions in General Regulations section.

ENG 6680 Thesis Option in Literature (3)
 An advanced study of a problem or issue in literary studies. Selection of topic must be approved by the student's thesis director, who will oversee the project. Final project must demonstrate knowledge of extant criticism on the topic and should contribute to the student's program. Oral defense of the thesis required before final approval. Recommended for students interested in pursuing doctoral work in literature.

ENG 6691 Research in Education (3)
 Research strategies for English educators and procedures for evaluating the language arts. ENG 6691 is a prerequisite for ENG 6696 Practicum.

ENG 6696 Practicum in Area of Specialization, English (3)
 Supervised experiences related to instruction in area of specialization. The application of skills, concepts, and principles acquired in previous courses will be emphasized. *Prerequisite: All courses in Teaching Field Component and ENG 6691 must be completed.*

FINANCE

FIN 6632 Investments (3)
 An introductory investments course which identifies and analyzes various forms of investments (such as corporate bonds, common stock, preferred stock) and government securities (such as bonds, notes and bills). The course also includes discussion of the securities market, brokerage functions, and stock exchanges. Particular emphasis is placed on the selection of securities based on

the degree of risk and expected rate of return. *Prerequisite: MBA 6631*

FIN 6633 International Finance (3)
 An examination of the foreign exchange market, exchange rate determination, international financial institutions, and the management of the risks associated with international business. *Prerequisite: MBA 6631*

FIN 6634 Derivative Securities (3)
 A study of options and futures markets, with emphasis on the nature of speculative transactions, pricing, and method of trading. *Prerequisite: MBA 6631*

FIN 6651 Financial Institutions (3)
 A comprehensive graduate study of financial markets and institutions. *Prerequisite: MBA 6631*

FIN 6652 Problems in Financial Management (3)
 Case discussions used to examine a broad range corporate finance issues and decisions. Topics include forecasting financial statements, capital budgeting, risk and return, estimation of capital costs, working capital analysis and business valuation. *Prerequisite: MBA 6631*

FIN 6653 Finance Research (3)
 A comprehensive graduate study of practical research in Finance. *Prerequisite: MBA 6631*

FIN 6656 Analysis of Financial Data (3)
 This course provides a study of the basic methods and techniques of data analysis in finance. It covers tolls such as regression and time series, including non-stationary models, multivariate concepts such as cointegration, and models of conditional volatility. *Prerequisite: MBA 6631*

FIN 6657 Corporate Risk Management (3)
 This course is a study of the analysis and treatment of the pure risks faced by corporations. The course includes development of the risk management process, analysis and uses of various techniques for managing identified exposures. *Prerequisite: MBA 6631*

FIN 6658 Special Topics in Finance (3)
 A study in unique topics in Finance. *Prerequisite: MBA 6631*

GEOGRAPHY

GEO 5503 Conservation (3)
 A study of the conservation of natural and human resources with emphasis on population expansion as the major element in a changing ecology.

GEO	5504	Economic Geography (3) A study of the spatial patterns of economic activities including production, distribution, consumption and the environmental consequences of these activities.	contribute to the student's program. Preparation of a scholarly paper is required and may involve oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
GEO	5506	Urbanism (3) A study of the historical, physical, economic, and social evolutions of urbanized areas. Emphasis on contemporary urban problems with implications for policy and planning.	
GEO	5508	Rural America: Past and Present (3) A study of rural society, its organizations, agencies, institutions, population trends and composition, patterns of settlement, social processes, and change in character.	
GEO	5511	Demography (3) An analysis of past and present population changes, population characteristics and the interrelationship of population and other social, economic, environmental, and political factors.	
GEO	5512	Geography of Latin America (3) This course covers Latin American countries and colonies and their strategic and economic importance to the U. S. <i>NOTE: Not open to education majors.</i>	
GEO	5526	Geography of the Russian Realm (3) An analysis of the physical and cultural elements of Russia and the other former republics of the Soviet Union.	
GEO	5535	Historical Geography of North America (3) An analysis of the physical and cultural factors in the development of North America from early European settlement to the present.	
GEO	5595	Selected Topics in Geography (3) This course focuses on a topic of a timely nature and/or special interest. Course may be taken twice for a maximum of six hours toward degree requirements. See semester hour limits listed under Course Restrictions in General Regulations section.	
GEO	6624	Geographic Characteristics of the Developing Realm (3) This course focuses on the identification and analysis of the social, economic, demographic, environmental, and political characteristics of the developing realm.	
GEO	6625, 6626, 6627	Specialized Study in Area of Geography (1-6 hours) A study of a problem or problems using research techniques. Selection of problem must be approved by the professor under whom the study is to be made, and the Dean of Arts and Sciences. The study should	
GEO	6650	Geography of the Global Economy (3) An examination of the global economy from colonialism to the present. Social, political, and environmental factors associated with the diffusion and intensification of world trade are examined.	
<hr/> HIGHER EDUCATION ADMINISTRATION <hr/>			
HEA	6611	Organization and Administration of Higher Education (3) This course is designed to acquaint education leaders in higher education with the control, organization, financial and business aspects, academic and student personnel administration of the instructional program, and community and government relationship.	
HEA	6612	Community Junior College (3) This course covers the rise and development of the community or junior college in American education, its philosophy and functions with specific attention to the transfer, terminal, and community-service functions. Problems of organization, curriculum construction, staffing and instructional procedures are stressed.	
HEA	6614	School Law (3) A study of school law as set forth in the common law, state, and federal constitutions, statutes, judicial decisions, and in the rules and regulations of state. Major emphasis will be on state and federal law and its impact on education today.	
HEA	6635	Seminar on the American College Student (3) An examination of contemporary college students, focusing on the environment pressures, psychological needs, and values. Emphasis will be placed on student, faculty and administration relationships and interactions. Recent research and literature on the college student will be examined.	
HEA	6660	Contemporary Issues in Higher Education (3) This course is an intensive examination of the major issues currently confronting higher education with emphasis on issues of major concern to individual students.	

- HEA 6690 Financing of Higher Education (3)**
 An analysis of private, state, and federal revenue sources; student aid, program budgets, financial methods and practices through the combination of theory with problems and issues facing the financing of higher education.
- HEA 6696 Practicum in Higher Education (1-3)**
 The Practicum is a supervised application of the concepts, principles, and skills acquired by the students in previous course work. Students will explore and identify alternative solutions to the problems through group interaction.

HISTORY

- HIS 5501 French Revolution and Napoleon (3)**
 A study of the absolutist-aristocratic France challenged by democratic-egalitarian ideals and revolution. The role of Napoleon as conqueror of Europe and as propagator and destroyer of the French Revolution is also studied.
- HIS 5502 Europe from 1815-1900 (3)**
 A study of Europe from the Congress of Vienna to 1900, including political, social, and economic developments in various countries, the rise of nationalism and unification movements, and imperialism.
- HIS 5503 Contemporary Europe (3)**
 Traces European developments in the 20th century, including domestic developments, World War I, Great Depression, rise of totalitarianism, World War II, European integration, the Cold War, and the post-Cold War era.
- HIS 5504 Military History of the United States (3)**
 A study of war in U.S. history from the Colonial era through the Vietnam war, with emphasis on the role of warfare in American history and the military-civilian relationship.
- HIS 5505 Old South (3)**
 An examination of the cultural, political, religious, and economic trends that shaped the colonial and antebellum south and the Civil War which ended that era.
- HIS 5506 New South (3)**
 An examination of the political, social, racial and religious trends and policies that defined the New South. Topics include reconstruction, redemption, agrarian unrest, Jim Crow, industrialization, Progressive Movement, World War I, the Great Depression, World War II, and the Civil Rights Movement.

- HIS 5509 England To 1688 (3)**
 A survey of English history from the Anglo-Saxons to the Glorious Revolution, emphasizing the interaction of the geographical, political, economic, and cultural forces which shaped England as a monarchy.
- HIS 5510 England Since 1688 (3)**
 The final evolution of the English political system from the reign of William and Mary to the contemporary era, including social and economic transformations, the British Empire, the two world wars, the welfare state, and current issues.
- HIS 5511 Colonial America (3)**
 Study of the colonial period from European discovery to the end of the French and Indian War, with emphasis on the political, economic, and social developments that set the stage for the American Revolution.
- HIS 5512 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 development of a distinctive American culture in the early national period.
- HIS 5513 Antebellum, Civil War and Reconstruction (3)**
 Nationalism, Jacksonian democracy, territorial expansion, slavery and sectional strife, and the resulting Civil War and Reconstruction are included.
- HIS 5514 Emergence of Modern America, 1877-1919 (3)**
 Agricultural decline and crisis, industrialization and urbanization, Progressive reform era, World War I, and America as a world power are discussed.
- HIS 5515 Contemporary America (3)**
 Examines America in the Great Depression, World War II and the Cold War, Civil Rights Movement, Johnson's Great Society, and America as a super power.
- HIS 5516 History of Alabama (3)**
 A study of the demographic, political, social, economic, and religious aspects of Alabama's history, emphasizing the role of the state within the nation.
- HIS 5520 The Vietnam War (3)**
 A study of the period 1946 to 1975 in Indochina with emphasis on the American involvement during and after the French colonial period, the escalating involvement of the Kennedy and Johnson administrations, and Vietnamization and withdrawal under

- President Nixon. Note: May be used for political science credit.
- HIS 5523 U.S. Foreign Policy To 1920 (3)**
A study of the factors, forces, and functions in the making of American foreign policy from the 1760's to 1920. Note: May be used for political science credit.
- HIS 5530 Civil Rights Movement (3)**
Study of the origins of the Civil Rights Movement in the late nineteenth and twentieth centuries, beginnings of change in the 1930s and the World War II era, and the movement itself as defined by legal, political, and social conflict and change from the latter 1940s to the present.
- HIS 5532 Russia to 1861 (3)**
A study of the history of the Eastern Slavic people from the prehistoric period, through the Kievan, Appanage, Muscovite, and Imperial periods from Peter the Great to the emancipation of the serfs in 1861.
- HIS 5533 Russia since 1861 (3)**
The development of the revolutionary movements and tsarist reform attempts, World War I, revolutions of 1917 and Bolshevik victory, establishment of the Stalinist state, World War II, the Cold War, Soviet domestic problems, and the disintegration of the USSR.
- HIS 5534 Major Personalities in the Development of Civil Rights in America (3)**
Study of important civil rights personages and their writings from Fredrick Douglass and other pre-Civil War activists and thinkers to the present.
- HIS 5535 Historical Geography of North America (3)**
An analysis of the physical and cultural factors in the development of North America from early European settlement to the present. Note: May be used as geography credit.
- HIS 5536 Civil Rights in Alabama (3)**
Study of the history of civil rights in Alabama beginning with the Reconstruction period and progressing through significant events and developments to the present. Course emphasis also will include legal developments and important personalities.
- HIS 5541 American Constitutional Development (3)**
American constitutional system with emphasis upon its origin and evolution via amendments and Supreme Court decisions. Note: May be used for political science credit.
- HIS 5542 Renaissance and Reformation (3)**
Historical review of the transitional centuries bridging the medieval and the modern eras, including the rebirth of art and literature, the Protestant and Catholic reform movements, and the role of kings and states.
- HIS 5543 Age of Absolutism (3)**
Survey of political and religious controversies that shaped affairs in Europe during the 16th and 17th centuries, emphasizing the flowering of monarchy and aristocracy.
- HIS 5544 Age of Reason (3)**
Survey of European history in the 18th century, emphasizing the cataclysmic developments in scientific, political, humanitarian, and economic thought that prepared the way for the rise of democracy in both the old and the new world.
- HIS 5545 Modern Germany (3)**
Survey of Germanic peoples from the Revolutions of 1848 to the present, emphasizing unification, two world wars, postwar division, and reunification.
- HIS 5548 Westward Movement (3)**
Study of the history of American expansionism and westward movement and its impact on political, economic, and social institutions.
- HIS 5550 Environmental History (3)**
An introduction to environmental history of the United States from the 18th century to the late 20th century, emphasizing the post World War II period. The course will focus on the historical development of the science of ecology, the origins of environmental problems and solutions attempted by government and experts, and responses by grassroots activists over time.
- HIS 5551 The Far East (3)**
Study of the development and interaction of Chinese, Japanese, and Korean civilizations; the impact of Western cultures, twentieth century conflicts, resolutions and accommodations.
- HIS 5554 Western Thought since the 17TH Century (3)**
Principal ideas and political thinking from the Age of the Enlightenment to the present.
- HIS 5560 Historiography (3)**
Study of methods and techniques of historical research. Use of bibliographies, journals, interpretive works, and critical evaluation of sources. Offered at Montgomery, on demand.
- HIS 5582 Hispanic American Beginnings (3)**
Colonial systems of Spain and Portugal in the Americas from the 16th to 19th centuries,

- with emphasis on revolt and the establishment of the Latin American republics and religious and economic institutions.
- HIS 5583 Latin American States (3)**
Cultural, social, political, and economic development in 19th and 20th centuries and international and U.S. relations.
- HIS 5595 Selected Topics in History (3)**
Historical examination of a designed topic of special and/or current interest and importance, which is generally not covered in regularly offered courses by the department. See semester hour limits listed under Course Restrictions in General Regulations section.
- HIS 6600 Problems in 19TH Century American Thought (3)**
Concentrated study of the history of ideas in the United States from 1800 to 1900. On demand.
- HIS 6602 Problems in 20TH Century American Thought (3)**
Concentrated study of the history of ideas in the United States, 1900 to present. On demand.
- HIS 6603 Seminar in 18TH Century American Thought (3)**
An exploration of major historical works and historiographical controversies in 18th century United States. On demand.
- HIS 6604 Seminar in Modern France (3)**
The evolution of France from the formation of the Third Republic to the present.
- HIS 6607 Issues in International Affairs (3)**
With directed reading and periodic discussion sessions, this course serves to expand the student's knowledge of current issues in the global setting. Formerly called *Colloquium in World History*, the course will emphasize recent scholarship and interpretations.
- HIS 6608 Colloquium in American History (3)**
A course for advanced graduate students that surveys recent trends in the interpretation, writing, and teaching of American history. Emphasis on reading and discussion of selected recent works in the field with the aim of updating professional competence.
- HIS 6609 Seminar in Early Modern Europe (3)**
An analysis of the historical developments and controversies of early modern Europe. On demand.
- HIS 6610 Seminar in Comparative Revolutions (3)**
An examination of background, outbreak, development, and conclusion of the American, French, Russia, and other revolutions. On demand.
- HIS 6611 Seminar in Modern Europe (3)**
An analysis of the major historical developments and controversies in 19th century Europe. On demand.
- HIS 6612 Seminar in Contemporary Europe (3)**
An analysis of major historical developments and controversies in 20th century Europe. On demand.
- HIS 6613 Seminar in Modern Britain (3)**
A topical analysis of political and social issues in modern British history. On demand.
- HIS 6614 Contemporary Japan (3)**
Study and analysis of Japan from the Meiji reforms to the present; Japan's impact on Asia and the rest of the globe; two world wars, the occupation and U.S. administration; internal changes and resurgence as a world power; the impact of Japan's domestic and foreign policies on other countries; Japan in international activities and as a regional model.
- HIS 6615 Seminar in Latin American History (3)**
Concentrated study in specialized areas with emphasis on 20th century history. *Prerequisite: HIS 5583 or permission of instructor.*
- HIS 6619 History of Victorian Britain (3)**
Examination of constitutional, political, economic, and intellectual foundations of 19th century Britain. On demand.
- HIS 6620 Research in International Studies (3)**
A course designed for the preparation of an original research paper using primary and secondary sources. Required in Dothan's International Studies Program.
- HIS 6621 History of England in Later Middle Ages (3)**
Study of England during the 14th and 15th centuries, with emphasis on cultural and political growth. On demand.
- HIS 6625, 6626, 6627 Specialized Study in Area of History (1-4)**
Study of problem or problems using research techniques. Selection of problem must be approved by the professor under whom the study is to be made and the Dean of Arts and Sciences. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. On demand. See semester hour limits listed under Course Restrictions in General Regulations section.

HIS 6651, 6652 Readings in History (3)
 This course of readings in history is designed to immerse a graduate student deeply into historical readings through a combination of classroom lectures, directed individual readings, and oral reports in class. The student will be guided in the use of historical criticism, and will review and discuss changing viewpoints with class and in office meetings with the professor. Qualified library personnel would resent the class with the latest electronic technology dealing with history. On demand. See semester hour limits listed under Course Restrictions in General Regulations section.

HIS 6696, 6697 Selected Topics in History (3)
 Investigation into current trends in the discipline of history that are not generally offered in regular graduate courses in the Department of History. A student would be permitted to take either HIS 6696 or HIS 6697 only once in his/her graduate program. On demand.

quirements for effective recruitment, selection, and promotion in organizational settings. The course provides an in-depth analysis of tools, techniques and statistical concepts applied to the fundamental HR function.

HRM 6623 Training and Development of Human Resources (3)
 A study of concepts and practices critical to identifying human resources training and developmental needs critical to ensuring organizational effectiveness.

HRM 6625, 6626, 6627 Specialized Study in the Area of Human Resource Management (1-6)
 Study of a problem or problems using research techniques. The study topic requires approval of the student's adviser, the instructor under whom study is to be made, the college dean and the graduate dean. The course requires preparation of a scholarly paper or project and may involve an oral defense. Total credit for any combination of enrollments in these courses is not to exceed six semester hours. A specialized study, with prior approval, may be substituted for only one required course in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.

HUMAN RESOURCE MANAGEMENT

HRM 6601 Legal Environment of Employment Decisions (3)
 This course is designed to help the student understand the law as it applies to the management of human resources. It addresses such topics as the judicial system, methods for resolving disputes, the constitution and the Bill of Rights as they apply to people and law involving administrative agencies. Its coverage is aimed at preparing the managers of human resources to recognize legal problems, to know the legal impact of decisions on personnel matters and to be knowledgeable of the law as it might impact individuals in organizations.

HRM 6632 Compensation Management (3)
 Designed to provide the student with both the theoretical and practical knowledge to design, administer, and evaluate compensation and benefits systems.

HRM 6645 International Human Resource Management (3)
 A survey of theory and practice of human resource management in global firms and issues of cross cultural communication and behavior affecting organizational effectiveness in culturally diverse organizations.

HRM 6603 Human Resource Management (3)
 The study of the management of people at work with emphasis on recruiting, selecting, training and evaluating personnel.

HRM 6689 Human Resource Management Internship (3)
 Must be unconditionally admitted to the Master of Science in Human Resources Management program, must have less than one year's work experience in the Human Resources Management field, must not be currently employed in any capacity by a firm or organization sponsoring the internship, must have completed at least four required courses by the start of the semester in which the internship begins (i.e., courses should include HRM 6603 and at least one of the following courses: HRM 6622, HRM 6623, or HRM 6632, as approved by the student's academic adviser). At least one semester prior to registration for the internship, students must submit a written request to the faculty adviser who will supervise the internship. The request should include the

HRM 6604 Labor Law (3)
 A broad overview of relevant laws, court decisions and administrative agency rulings relating to union/management relations. An introduction to the techniques, strategies and objectives of contract negotiation and collective bargaining in union/management relations.

HRM 6619 Seminar in Human Resource Administration (3)
 Analysis and discussion of current problems and issues in HRM.

HRM 6622 Human Resource Staffing (3)
 Study of theory, principles, and legal re-

student's reasons for wanting to participate in the internship program as well as the goals the student hopes to achieve. The internship request must be approved prior to registration for credit.

HRM 6698 Strategic Human Resource Management (3)
 This course focuses on an integration of theories and concepts related to the formulation and implementation of human resource strategies to support business strategies. Students analyze case studies, identify problems and their causes, and propose solutions both orally and in writing. The course is also designed to broaden the student's exposure to the classical and contemporary literature of human resource management. This is the HRM capstone course. HRM students must have successfully completed no fewer than five HRM courses, to include HRM 6601, 6603, 6622, 6623, and 6632.

HEALTH SERVICES ADMINISTRATION

HSA 6680 Health Services Administration and Policy (3)
 The course focuses on the unique characteristics of the U.S. healthcare delivery system; acquaints students with increased understanding of the context of health services administration and healthcare policy; and examines key factors and forces impacting total health system performance in the United States.

HSA 6681 Legal and Social Issues in Health Administration (3)
 This course includes an examination of legal and ethical aspects of contemporary issues associated with the health services administration process.

HSA 6682 Healthcare Planning and Management (3)
 This course stresses application of traditional management concepts to a variety of health service operational issues, analyzes similarities and differences in management of health service organization (HSO) and other organizational models, formulates new organizational designs and management practices appropriate to current HSO environments, and evaluates adequacy of new models.

HSA 6683 Healthcare Economics (3)
 This course stresses economic analysis applied to the health services sector.

HSA 6684 Managed Care: Origins, Organizations, and Operations (3)
 Covers managed care programs, structures, practice models, role of physicians and other clinicians, capitation, cost-accounting and forms of reimbursement.

INTERDISCIPLINARY EDUCATION

IED 5544 Internship Seminar (3)
 This course provides interns an opportunity to develop analytical thinking skills through examining 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. This course must be taken concurrently with internship.

IED 6655 Interdisciplinary Internship in Grades P-12 (6)
 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.

INTERNATIONAL HOSPITALITY MANAGEMENT

IHM 6680 Global Marketing Strategy for Hospitality Executives (3)
 Application of marketing concepts, principles and procedures for planning, developing, implementing and controlling marketing programs in multinational hospitality organizations. Emphasis is on the matching of organization resources and strengths with global marketing opportunities, and strategies to overcome environmental threats. Examination of marketing and service industries within the context of the hospitality of marketing mix and the implementation of service strategies within hospitality. Strategy applied to planning, analysis and control within the international and multinational hospitality setting; emphasis on situation analysis of customer needs, market position, and competition.

IHM 6681 Managing Financial Systems in the Hospitality Industry (3)
 The examination of international of financial theories that will assist management policies relative to the objective of maximizing shareholder wealth and to familiarize the student with analytical tools that assist in financial decision making. It includes elements of the foreign exchange market, exchange rate determination, international financial institutions, and the management of the risks associated with international business. *Prerequisite: MGT 6696*

IHM 6682 International Hospitality Legal Issues (3)
 The examination of international and domestic legal theories and issues relevant to man-

agers in the hospitality industry. It includes the legal issues that will encourage students to think critically about legal concepts related to hospitality. It includes areas of the general legal environment, hospitality contracts, operating structures, managing property, regulatory and administrative concerns in the hospitality industry, managing insurance, legally hiring and managing employees, legal responsibilities to guests, legal responsibilities in food services, safety and security issues.

IHM 6683 International Hospitality Operations (3)
 The course examines the foundational concepts of leadership and management, reviews theories of quality and continuous improvement within organizations, and investigates critical issues in leadership, communication, coaching, teams, diversity, change, and goal-setting as they apply in the contemporary hospitality workplace. Applications develop critical thinking skills about the concepts. The purpose of the course is to present concepts of leadership and to develop an understanding of diversity, high-performance teams, employee empowerment and motivation, and cultural change for the enrichment of theoretical background to support effective participation in positions of senior management in the hospitality industry.

IHM 6689 International Hospitality Management Internship (3)
 For the International Hospitality Management concentration only, a consulting-type internship of at least 120 hours will be completed in place of the core MGT 6627 requirement, and will be accomplished with a hospitality industry firm (hotel, lodging, or restaurant chain or tourism board) after completing no fewer than 21 semester hours in the program, including nine semester hours in the IHM concentration. (Required in the IHM concentration.)

INFORMATION SYSTEMS

IS 6672 Information Systems and Business Strategy (3)
 Considers the role of operations and information systems in defining competitive business strategies. Structural decisions (product design, marketing, and finance) as well as issues that cross corporate boundaries (strategies for distribution, supply management and global operations) are addressed. Examines emerging issues such as global manufacturing, e-commerce, sourcing strategies, manufacturing automation and environmental issues. *Prerequisite for MBA students: MBA 5505 or equivalent*

IS 6674 Information Systems Management (3)
 Theoretical and practical applications for managing computerized information systems; planning and control functions of the firm; emphasis on case studies of design projects; the application of human and organizational issues of Management Information Systems (MIS); current academic research into the analysis, design, and implementation of computer information systems. *Prerequisite for MBA students: MBA 5505 or equivalent*

IS 6676 E-Commerce for Global Business (3)
 Introduces state-of-the-art concepts and applications which are emerging in the field of electronic commerce. *Prerequisite for MBA students: MBA 5505 or equivalent*

IS 6679 Management Information Systems (3)
 Conceptual and practical foundations of information systems to include support of management and decision-making functions, computer system project management, economic and legal considerations of management information systems, and system implementation/evaluation. *Prerequisite for MBA students: MBA 5505 or equivalent*

INTERNATIONAL RELATIONS

IR 5502 International Political Geography (3)
 An analysis of the reciprocal effects of geography and political organization on the behavior of states including boundaries and frontiers, national resources, spatial strategy and maritime power.

IR 5524 Contemporary American Foreign Policy (3)
 This course examines the foreign policies processes of the United States: historical traditions, political institutions, economic and military capabilities, the Congress, the Presidency, interest groups, the media, and public opinion.

IR 5533 Comparative Government (3)
 A comparative analysis of state governments in the world with an emphasis on political cultures, governmental institutions and political processes that lead to differences and international tensions.

IR 5551 Survey of International Relations (3)
 An introduction of the discipline of International Relations for graduate students; states, power, national interests, the security dilemma, instruments of foreign policy, challenges to sovereignty, international organizations, and globalization.

IR 5552 International Law (3)
 An examination of the sources and develop-

- ment of international law from historical, political, legal, and philosophical standpoints, with emphasis on substantive areas of law.
- IR 5570 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.
- IR 6600 Selected Topics in International Relations (3)**
An examination of a specifically defined topic of special and/or current interest and importance, which is not covered in regular course offerings in the International Relations program. A selected topic in International Relations course can only be used as an elective in the program. See semester hour limits listed under Course Restrictions in General Regulations section.
- IR 6601 Research Methods in International Relations (3)**
An investigation of the research methodologies employed in the study of International Relations including research design, variables and hypotheses, citations and reference, qualitative analysis and quantitative techniques. A substantial research paper is required in the course. **Note: MSIR candidates must achieve a grade of "B" or better in IR 6601 to complete degree program requirements.**
- IR 6602 Geostrategic Studies (3)**
This course examines the political, military, economic and cultural effects of geography in historical and contemporary terms. Specific emphasis is placed on the role of geography in the formulation of military-political policy in land power, sea power, airpower, and outer space. Comprehensive geopolitical theories will be employed as analytical tools in the course.
- IR 6610 International Organizations (3)**
This course examines the evolution and functions of international organizations; political structures and international systems for the collective use of power and cooperative action among states; and the impact of international Non-Governmental Organizations (NGO) and other types of transnational relations and organizations on global affairs.
- IR 6612 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.
- IR 6620 International Political Economy (3)**
An examination of the interrelationships between international politics and economics: states and markets, theories of IPE, trade, foreign investment, international monetary affairs, foreign aid, state development strategies, and globalization.
- IR 6625, 6626, 6627 Specialized Study in International Relations (3)**
A study of a problem or problems using research techniques. Selection of the problem must be approved by the student's adviser, the instructor under whom the study is to be made, and the department chair. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. A specialized study may be substituted for a required course only once in a student's program. It may, however, be substituted for one or two electives. *Prerequisite: IR 6601.* See semester hour limits listed under Course Restrictions in General Regulations section.
- IR 6629, 6630 Seminar in International Relations (3)**
An analysis of specified topics at the international level. (For example: "Armaments, Disarmament, and Proliferation," "Nationalism and World Order," "Peacekeeping," or "Organized Use of Force") All selected topics courses must be approved by the department chair. The course can be used to substitute for a required course only once in a student's degree program. The substitution must also be approved by the department chair.
- IR 6631 Intercultural Relations (3)**
An analysis of the influence of culture on interstate relations including theories, concepts, and applications.
- IR 6633 Developed and Developing Nations (3)**
An analysis of the systemic linkages between advanced, emerging and weak states; focus will be on the political, economic, and cultural issues relevant to the international relations of those states within both a regional and global context.
- IR 6634 Tradition, Revolution, and Change (3)**
This course represents an interdisciplinary, cross cultural approach to the study of comparative cultural change and its impact on the international system. It examines the origins, processes, and outcomes of socio-political change within various nations and states.
- IR 6635 National Security Policy (3)**
An examination of the structures, motiva-

- tions, and major objectives of national security policymaking from a comparative perspective with particular emphasis on the politics of national defense in the United States.
- IR 6640 Government and Politics of Developing Nations (3)**
An analysis of the modernization of developing states from a political, economic, social, and cultural perspective. Major strategies pursued by developing states for their growth and development will be discussed, including those shared by developing states which have a significant effect on the political and economic interaction between the developing and developed worlds.
- IR 6641 Latin America in World Affairs (3)**
An examination of Latin American politics, legal systems, economics, culture, military power, geography, and their impact on Latin American regional relations and linkages to the world system.
- IR 6642 Russia and Eastern Europe in World Affairs (3)**
An examination of Russia and Eastern Europe's politics, legal systems, economics, culture, military power, geography, and their impact on regional relations and linkages to the world system.
- IR 6644 Middle East in World Affairs (3)**
An examination of Middle East politics, legal systems, economics, culture, military power, geography, and their impact on regional relations and linkages to the world system.
- IR 6645 Asia in World Affairs (3)**
An examination of Asian politics, legal systems, economics, culture, military power, geography, and their impact on regional relations and linkages to the world system.
- IR 6647 Western Europe in World Affairs (3)**
An examination of Western European politics, legal systems, economics, culture, military power, geography, and their impact on regional relations and linkages to the world system.
- IR 6648 Sub-Saharan Africa in World Affairs (3)**
An examination of Sub-Saharan politics, legal systems, economics, culture, military power, geography, and their impact on regional relations and linkages to the world system.
- IR 6652 Theory and Ideology in International Relations (3)**
An examination of historical and contemporary theories in international relations; the
- role of political, economic, ethnic, religious and other belief systems or philosophical approaches within the global system.
- IR 6653 Political Psychology (3)**
An examination of the impact of individual and collective human behavior on the political process. An introduction to the methods of inquiry into a society's belief system, social cognition, socialization, and political behavior. Special attention is placed on the behavioral sources of political violence, the relationship between culture and political behavior, and collective alienation.
- IR 6654 Media, Technology, and International Politics (3)**
This course focuses on the role of media in international politics with particular emphasis on the impact of technological change. This includes the reportage and representation of world events through the broadcast, print, and entertainment media. The course explores issues related to cultural change through media communication, elite empowerment and ownership of media assets, the changing nature of foreign and domestic influences in politics and the role of media technology in affecting approaches to public policy issues.
- IR 6655 International Conflict Management (3)**
This course analyzes responses to international conflict and approaches to establishing peace and peacekeeping at the local, national, and global levels to include theoretical constructs about conflict management techniques (mediation, negotiation, escalation, de-escalation, termination, and outcomes).
- IR 6656 International Power and Influence (3)**
A theoretical and empirical examination of how nations use political, military, and economic resources to influence the behavior of other nations. The course will consider the effectiveness of political communications, public relations, foreign aid, economic sanctions, threats of force, and limited uses of force. Special emphasis will be placed on the effects of foreign influences on domestic politics.
- IR 6660 Military Strategy and International Relations (3)**
An assessment of military leaders and armed forces in the development of national security and foreign policies; classical methods of maintaining peace; civil-military relations in the developed and the less developed states; the impact of rapid technological change and weaponry in international politics; the role of the military in the shaping of war and peace since 1947.

IR 6665	Readings in International Relations (3) A guided program of readings and study in international relations which are related to the needs of the student. Enrollment must be approved by the department chair. See semester hour limits listed under Course Restrictions in General Regulations section.	involve the student in the political, cultural, and social aspects of these two phenomena. The content of the course will include an investigation of the politics that govern tribalism and colonialism, the sociological influences it has induced, and how the two concepts impact upon the people of Africa today.
IR 6668, 6669	Thesis (3) Directed research in selected areas of international relations, based on a student's proposal, related to the student's needs, and with the advice and approval of a faculty thesis adviser, and culminating in a research paper of appropriate depth and scholarship. The final, bound product must be approved by a faculty committee composed of the thesis adviser and a faculty reader. The first course will cover the paper design and supporting research, while the second course will be undertaken to support the actual writing of the thesis. <i>Prerequisites: IR 6601 and the satisfactory completion of 24 semester hours in the MSIR program.</i> A grade of "pass" or "fail" will be assigned to both courses.	IR 6685 Terrorism and Political Violence (3) An examination of the origins and significance of contemporary political violence with an emphasis on the phenomenon of terrorism. The course employs an interdisciplinary, case-study approach.
IR 6670	United Kingdom in World Affairs (3) An examination of the United Kingdom and its relations with the global community. The course will involve the student in the political, cultural, and social aspects of the state and its relations with other states.	IR 6686 Drug Politics in the Americas (3) This course investigates the issues surrounding the trafficking of illicit narcotics in the western hemisphere, with special attention to the Andean region and those states which act as conduits to the vast market in the United States. The course examines both the political and security problems arising from the drug trade, as well as the basic debate concerning the formulation and implementation of U.S. drug policy.
IR 6672	Germany in World Affairs (3) An examination of Germany and its relations with the global community. The course will involve the student in the political, cultural, and social aspects of the state and its relations with other states.	IR 6687 Free Trade and Economic Integration in the Western Hemisphere (3) A critical analysis of the origins, development, consolidation and limitations of free trade and economic integration in the Western Hemisphere. Special attention will be given to the complex political, economic and social forces that support, hinder and otherwise shape such international economic agreements.
IR 6675	Central America in World Affairs (3) An examination of the Central American region and its relations with the global community. The course will involve the student in the political, cultural, and social aspects of regional states and their relations with other states.	IR 6688 Islamic Fundamentalism (3) An advanced seminar dealing with the theology and practice of Islam and its impact on international, legal, political, security, and social issues.
KINESIOLOGY AND HEALTH PROMOTIONS		
IR 6676	Japan in World Affairs (3) An examination of Japan and its relations with the global community. The course will involve the student in the political, cultural, and social aspects of the state and its relations with other states.	KHP 6601 Philosophy and Principles of Health and Physical Education (3) This course will introduce the sociological-psychological, educational-motor learning, mechanical-kinesiological, and physiological aspects of health and physical education.
IR 6677	China in World Affairs (3) An examination of China and its relations with the global community. The course will involve the student in the political, cultural, and social aspects of the state and its relations with other states.	KHP 6602 Motor Skills and Human Performance (3) In an interdisciplinary approach, students will be exposed to a systematic analysis of motor skills and human performance. Students will learn how to observe, evaluate and diagnose, and apply interventions to improve motor skill performance.
IR 6681	Tribalism and Colonialism in Africa (3) An examination of the impact of African tribalism and colonialism in detail. It will	KHP 6604 Measurement and Evaluation in Health and Physical Education (3) The course discusses the proper selection

and application of tests and measurements in health and physical education. Practical and economical tests in the various performance areas which can be used by the health and physical education teacher in the school situation will be examined.

KHP 6610 Physical Education, Sport and the Law (3)

The course is designed to provide students an awareness and understanding of basic legal responsibilities of educators and coaches.

KHP 6615 Sport Administration (3)

The study of the basic concepts, theories and organization of administration including financial management as applied to sport, physical education, recreation, and intramurals.

KHP 6616 Sport Finance (3)

This course is designed to provide students with information concerning advanced theory in finance, accounting, and managerial control of budgets.

KHP 6617 Readings in Health and Physical Education (3)

An independent exploration of the literature and current research in the fields of Health Education and Physical Education.

KHP 6620 Physical Fitness: A Critical Analysis (3)

The course involves an examination of the effects of physical activity on various fitness and health parameters by reviewing current research studies. Students will be introduced to methods of evaluating one's fitness level and the proper prescription guidelines.

KHP 6621 Supervision of Instruction in Health and Physical Education (3)

Consideration is given to the broader viewpoint of supervision as it relates to the improvement of health and physical education through in-service training of personnel, association with the teaching and administrative-supervisory staff, and general school and community relationships. Techniques of supervision and their application in improving the teacher-pupil learning situations will be examined.

KHP 6623 The Biomechanics of Sports Techniques (3)

The course explores the basic biomechanical concepts and their application in the analysis of sport technique.

KHP 6625, 6626, 6627 Specialized Study in KHP (1-3)

A study of the problem or problems using research technique. Selection of problem must be approved by student's adviser, instructor under whom the study is to be made, and the appropriate Director of Graduate

Studies. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed six semester hours. A specialized study may be substituted for a required course only once in a student's program.

See semester hour limits listed under Course Restrictions in General Regulations section.

KHP 6630 Programs in Health and Physical Education (3)

The course is designed for prospective classroom teachers and health and physical educators who assume the responsibility of providing meaningful learning experiences for children in the area of health and physical education.

KHP 6631 Programs in Health and Physical Education (3)

The course reviews appropriate curriculum for children of various age levels. Particular attention is devoted to a study of the capacities, attitudes, and needs of pupils as they are related to health and physical education. The principles, problems and procedures in the development of a health and physical education curriculum are thoroughly examined.

KHP 6632 Critical Issues in Sport and Fitness Management and Health and Physical Education (3)

Recognition, discussion, and systematic analysis of controversial issues and problems encountered in the conduct of professional activities in health and physical education.

KHP 6640 Sport Marketing: Physical Education, Athletics, Recreation and Intramurals (3)

The purpose of this course is to teach educators how to create a marketing plan. The emphasis is on following a ten-step procedure designed primarily for the non-profit sector and learning the theoretical base required to complete the process accurately and proficiently.

KHP 6650 Nutrition and Physical Performance (3)

The course will examine the special dietary requirements of athletes, the importance of pre- and post-event nutrition, potential nutritional problems encountered by athletes and possible ergogenic foods and drugs.

KHP 6662 Diagnostic and Prescriptive Physical Education for Exceptional Children (3)

The course is designed to present assessment procedures, exercise prescription techniques, physical education program development, and IEP programming for the child with special needs.

- KHP 6670 Exercise and Disease Prevention (3)**
This course examines the scientific evidence in support of the beneficial effect of regular physical activity on reduced mortality from all causes: from diseases such as cardiovascular diseases, non-insulin-dependent diabetes mellitus and colon cancer, and from conditions such as obesity and high blood pressure.
- KHP 6671 Exercise through the Lifespan (3)**
This course will survey the effects of exercise and training programs on the growth and development of children and adolescents. It will also explore the effects of exercise on the physiological and psychological aspects of aging.
- KHP 6672 Sport Psychology (3)**
The course is designed for the student with a vocational interest in athletic coaching within the educational environment. Psychological theories will be applied to the teaching of sports skills and the development of individuals into efficient team units.
- KHP 6673 Ethics in Sport (3)**
The course is examines ethical matters and issues relating to sport and physical activity.
- KHP 6674 Entrepreneurship in Sport (3)**
The course provides the student with an awareness and understanding of basic concepts and problems in starting a business.
- KHP 6691 Research Methods in Health and Physical Education (3)**
This course examines the variety of research methods and reporting methods used in health & physical education research.

LAW

- LAW 6600 Business Law for Accountants (3)**
This course focuses on the legal implications of business transactions, particularly as they relate to accounting and auditing. It includes, but is not limited to, such topics as contracts, commercial paper, secured transactions, business organizations, and real and personal property. This course is designed to give a review of basic legal principles and to enable a student to recognize and understand their legal significance in business transactions.

MARINE BIOLOGY (MB)

Offered at Dauphin Island Sea Lab (DISL) only

Courses are offered during the summer semester only.

Since course offerings change, check the current DISL summer bulletin for specific course offerings and descriptions and contact the Marine Biology Adviser at Troy or Dothan.

The courses listed below are taught at Dauphin Island Sea Lab in the summer only. The faculty members are recruited from many colleges and universities within and outside Alabama. The courses are identified by an MB prefix.

- MB 5502 Marine Invertebrate Zoology (4)**
A study of the natural history, systematics, and morphology of marine invertebrates from a variety of habitats in the Gulf of Mexico. Participation in extended field trips is part of the course. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143*
- MB 5503 Marine Vertebrate Zoology (4)**
A study of the biology of marine vertebrates emphasizing systematics, behavior, physiology, and ecology of local forms. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, CHM L143*
- MB 5504 Marine Botany (4)**
A general survey of algae and vascular plants associated with the marine and estuarine environment. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143*
- MB 5506 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*
- MB 5521 Marine Technical Methods (2)**
An introduction to the hardware of marine science, sampling procedures, processing, station location, and field equipment maintenance/operation.
- MB 5523 Marine Ecology (4)**
Lecture and laboratory studies of bioenergetics, community structure, population dynamics, predation, competition, and speciation in marine ecosystems. *Prerequisites: BIO 2229, L229, CHM 1143, L143*
- MB 5525 Coastal Ornithology (4)**
A study of coastal and pelagic birds with emphasis on ecology, taxonomy, and distribution. *Prerequisites: BIO 1101, L101, 2229, L229, CHM 1143, L143*
- MB 5526 Coastal Zone Management (2)**
An examination of specific laws and regulations which govern the coastal zone and how coastal processes affect management issues. *Prerequisites: BIO 1101, L101, 2229, CHM 1143, L143*

MASTER OF BUSINESS ADMINISTRATION

MBA 5502	Fundamentals of Accounting and Finance (3) A survey of fundamental theories, concepts, principles, and practices in finance, financial accounting, and managerial accounting that provides a foundation for further study in graduate accounting and business courses. Students must earn a grade of "B" or better in the course.		
MBA 5503	Fundamentals of Economic Analysis and Business Law (3) A survey of key concepts in economics and business law that provides a foundation for further study in graduate economics and the MBA curriculum. Students must earn a grade of "B" or better in the course.		
MBA 5504	Fundamentals of Management and Marketing (3) A survey of key concepts in marketing and management that provides a foundation for further study in graduate marketing and management courses. Students must earn a grade of "B" or better in the course.	MBA 6613	Seminar in Business (3) Study and analysis of current topics on the leading edge of business. A combination of core material, readings, and research reports on contemporary aspects of business.
MBA 5505	Fundamentals of Information Systems and Quantitative Methods (3) A survey of key concepts in statistics and information systems that provides a foundation for further study in graduate quantitative methods and management information systems. Students must earn a grade of "B" or better in the course.	MBA 6625, 6626, 6627	Specialized Study in the Area of Business Administration (1-3) Study of problem or problems using research techniques. Selection of the problem must be approved by the student's adviser, the instructor under whom the study is to be made, and the appropriate dean or branch director. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed six semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
MBA 6605	Business and Professional Communication (3) Development of skills to assist managers to communicate to both internal and external audiences, to conduct meetings, to negotiate, and to resolve conflict. Emphasis is placed on oral and written presentation skills using state-of-the-art technologies and presentation software.	MBA 6631	Managerial Finance (3) A comprehensive and advanced study of financial analysis, planning, and control techniques for a business entity with emphasis on corporations. <i>Prerequisite: MBA 5502 or equivalent.</i>
MBA 6608, 6609	Thesis (3) Information regarding the thesis program can be obtained from the dean of the College of Business or branch director.	MBA 6640	Quantitative Analysis for Managers (3) This course provides an in-depth study of the fundamental theories, concepts, and principles of statistics. Coursework will include extensive use and application of statistical tools to analyzing business data using statistics software. Topics covered include descriptive statistics, probability distributions, sampling, estimation, hypothesis testing, ANOVA and regression analysis.
MBA 6610	Business Research Design (3) Designed for the student to develop and demonstrate competency in business research methodology and techniques. This course teaches the MBA student proper research techniques and includes a research proposal. A grade of "B" or better is required. <i>Prerequisite: MBA 5505 or equivalent.</i>	MBA 6641	Decision Theory (3) An analysis of the probabilistic and deterministic quantitative techniques available to the business manager involved in the decision making process of the market place. In-
MBA 6611	Business Strategy (3) This course is the capstone course in the MBA program. It integrates the skills and		

cluded is an evaluation of the models and processes now available for problem-solving purposes.

MBA 6651 Managerial Economics (3)
 A study of the decision-making process of business firms in the resource allocation process. Both the functioning of markets and the decisions of firms in a variety of market structures are considered. Various theories of the firm are used to study the optimal decision-making rules for business firms under conditions of uncertainty. *Prerequisite: MBA 5503, 5505 or equivalents.*

MBA 6652 Macroeconomics and Forecasting (3)
 An analysis of the causes of business cycles with the applications of macroeconomic theory and economic forecasting techniques available to the business manager. *Prerequisite: MBA 5503, 5505 or equivalents.*

MBA 6661 Strategic Marketing Management (3)
 Application of marketing concepts, principles and procedures for planning, development, implementation and control of marketing programs in profit and non-profit organizations. Emphasis is on the matching of organization resources and strengths with global marketing opportunities, and strategies to overcome environmental threats. *Prerequisite: MBA 5504 or equivalent.*

MBA 6671 Organizational Behavior (3)
 Contemporary concepts and theories of organization and the behavior of individuals and groups applied to organizations in the global business environment. *Prerequisite: MBA 5504 or equivalent.*

MBA 6673 Operations Management (3)
 An analysis of the conditions under which production and management of goods and services take place in business organizations with attention to the delineation of roles played by management and labor in carrying out production and application of selected quantitative techniques used in production. *Prerequisite: MBA 5504, 5505 or equivalents.*

MANAGEMENT

MGT 6600 Advanced Concepts and Topics in Management (3)
 Provides an introduction to the fundamental theories, concepts, principles and practices in private, public, and not-for-profit management.

MGT 6625, 6626, 6627 Specialized Study in Management (1-6)
 Study of a problem or problems using re-

search techniques. Selection of the problem must be approved by the student's adviser, the instructor under whom the study is to be made, and the appropriate branch director. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed six semester hours. No more than three semester hours credit of this course may be transferred in from another institution. See semester hour limits listed under Course Restrictions in General Regulations section.

MGT 6645 Quantitative Methods in Management (3)
 An introduction to statistics as applied to business problems. The course is designed to develop students' ability to apply inferential statistical methods to decision making in business.

MGT 6670 Seminar in International Management (3)
 A survey of theories and issues related to managing the internationalization of business firms and multinational management.

MGT 6671 Organizational Behavior (3)
 The evolution of theories of human behavior in organizations with emphasis on modern concepts of organization and behavior of individuals, groups and the organization in the global business environment.

MGT 6673 Operations Management (3)
 Description and analysis of the conditions under which production of goods and services takes place. Delineation of the roles played by management and labor in affecting production. Quantitative techniques used in production.

MGT 6674 Ethics in Business (3)
 Examination of ethical problems and conflicts encountered by managers attempting to fit their organizations to the larger social environment. Addresses ethics, codes of ethics, social responsibility of organizations in domestic and global environments.

MGT 6675 Theory of Organizations (3)
 The study of general business management from a structural standpoint: planning, organizing, staffing, directing, and controlling.

MGT 6677 Systems Management (3)
 The study, design, implementation and operation of a system within the organization.

MGT 6681 Organization Development and Change (3)
 A study of management concepts and practices useful in improving organizational performance. Theories and concepts applicable to making organizations more hospita-

ble to people and more productive in accomplishing their goals and objectives are identified and discussed. Special attention is paid to strategic interventions and change in both private and public sector organizations and in the global arena.

- MGT 6682 Leadership and Motivation (3)**
The course examines the foundational concepts of leadership, reviews traditional theories of leadership, and investigates critical issues in leadership and motivation as they apply in the contemporary workplace. Applications develop critical thinking skills about the concepts.
- MGT 6685 Management Strategy (3)**
Study of the integrative functions of senior management in long-range strategic planning and decision making to support implementation. This is a capstone course which utilizes all the skills and knowledge developed earlier in the program. It focuses on policy problems and planning beyond the boundaries of the firm. It emphasizes advanced case analysis and computer simulation. *Prerequisite: Must have completed 18 semester hours with a grade of "C" or higher in required or elective courses, not to include guided research or independent study courses.*
- MGT 6689 Management Internship (3)**
Independent study of a practical problem or project, pertinent to a management concentration, taken in a field setting. A formal written paper or report on the problem or project will be submitted according to the guidelines set forth by the instructor. A verbal presentation and/or oral examination covering problem or project research and findings/results is required. No more than one internship may be used as the MSM "select one" elective. The course may not be substituted for a required course.
- MGT 6695 Accounting Analysis (3)**
The development of an understanding of how accounting information can be interpreted and used by management to aid in the planning and controlling functions of business.
- MGT 6696 Financial Analysis (3)**
The development of an understanding of financial theory that will assist management's evaluation of the firm's investment, financing, and dividend policies relative to the objective of maximizing shareholder wealth and to familiarize the student with analytical tools that assist in financial decision making.

MATHEMATICS

Note: Multivariable calculus and a course in proof techniques or its equivalent or permission of the mathematics adviser are required prerequisites for all graduate mathematics courses.

- MTH 5512 Discrete Mathematics (3)**
This course covers sets, relations, functions, counting, algorithms, Boolean algebra, and graphs.
- MTH 5520 Introduction to Graph Theory (3)**
The elements of the theory and algorithms of graphs and hypergraphs with motivating examples from computer science, networking, scheduling, biology etc.: algorithms, complexity, data structures, shortest paths, spanning trees, depth-first search, planar graphs, colorings of graphs and hypergraphs. *Prerequisites: Linear Algebra, computer programming course, or permission of instructor.*
- MTH 5522 Numerical Analysis (3)**
This course covers topics including finite differences, interpolation, numerical integration and differentiation, solutions of equations of one variable, linear systems, and numerical solutions of ordinary differential equations.
- MTH 5524 Real Analysis I (3)**
A study of the real number system, completeness, limits, continuity, sequences, differentiation, and the Riemann integral.
- MTH 5525 Real Analysis II (3)**
A study of sequences and series of functions, series, and a continuation of the integral to include the Fundamental Theorem of Calculus. *Prerequisite: MTH 4424 or MTH 5524.*
- MTH 5526 Complex Analysis (3)**
A study of complex numbers, elementary functions and their mappings, complex limits and power series, analytic functions, integrals, contour integral, and Cauchy integral formula.
- MTH 5536 Number Theory (3)**
This course covers divisibility, congruences, prime numbers, Fermat's theorem, Diophantine equations, number theoretic functions, quadratic reciprocity.
- MTH 5541 Abstract Algebra I (3)**
A study of properties of the integers, modular arithmetic. Elementary theory of groups, finite groups, subgroups, cyclic groups, permutation groups. Group isomorphisms and homomorphisms.
- MTH 5542 Abstract Algebra II (3)**
This course covers the elementary theory of

- rings, polynomial rings, divisibility, unique factorization domains. Integral domains, ideals, factor rings, divisibility in integral domains. Elementary theory of fields. Extension fields. *Prerequisite: MTH 4441 or MTH 5541.*
- MTH 5551 Mathematical Statistics I (3)**
A study of probability theory, sample spaces, random variables, mutual exclusion, independence, conditional probability, permutations and combinations, common discrete and continuous distributions, expected value, mean, variance, multivariate distributions, covariance, Central Limit Theorem.
- MTH 5552 Mathematical Statistics II (3)**
A study of the fundamentals of the theory of statistics, the Central Limit Theorem, point estimation, sufficiency, consistency, hypothesis testing, sampling distributions, confidence intervals, linear regression models, interpretation of experimental results, Bayesian Estimation. *Prerequisite: MTH 4451 or MTH 5551.*
- MTH 5560 Topology (3)**
An introduction to metric and topological spaces and associated topics, separation axioms, compactness, and connectedness.
- MTH 6600 Modern Topics in Mathematics (3)**
An investigation of current topics in mathematics that are generally not covered in regularly offered graduate courses in the mathematics graduate curriculum. *Prerequisites will be determined by the topic under investigation.*
- MTH 6601 Metric Education for Elementary Teachers (3)**
A study of the materials and methods program of instruction with workshops in selected school systems. *Prerequisite: Admission by permission of instructor.*
- MTH 6610 History of Mathematics (3)**
The course is designed to acquaint the secondary mathematics teacher with the historical development of mathematics with particular attention given to the techniques of the period studied.
- MTH 6612 Advanced Discrete Mathematics (3)**
This course covers trees, network models and Petri nets, Boolean algebra and combinatorial circuits, automata, grammars, and languages. *Prerequisite: MTH 4412, MTH 5512 or permission of instructor.*
- MTH 6615 Advanced Topology (3)**
Generalization of such topics as functions,
- continuous functions, open, closed, compact and connected sets, arbitrary topological spaces. *Prerequisites: MTH 4424 or 5524, MTH 4426 or 5526 or permission of instructor*
- MTH 6616 Mathematical Models (3)**
An introduction to the modeling process. Students will practice creative and empirical model constructions, analyze models and do independent model research. Application using paired data will be included.
- MTH 6620 Advanced Concepts of Algebra (3)**
This course covers topics including rings and fields, polynomial rings and factorization, and Galois theory. *Prerequisite: MTH 4442 or 5542 or permission of instructor*
- MTH 6621 Foundations of Mathematics (3)**
A study of the axiomatic nature of mathematics, theory of sets, cardinal and ordinal numbers, continuum hypothesis and axiom of choice.
- MTH 6624 Applied Combinatorics (3)**
A study of generating functions, Inclusion-Exclusion, Burnside's Theorem and Polya's Enumeration Formula.
- MTH 6625, 6626, 6627 Specialized Study in Area of Mathematics (3)**
A study of a problem or problems using research techniques. Selection of problem must be approved by student's adviser, instructor under whom the study is to be made, and the appropriate director of the Graduate School or Dean of Arts and Sciences. *Note: Total credit for any combination of enrollments in these courses may not exceed six semester hours.* See semester hour limits listed under Course Restrictions in General Regulations section.
- MTH 6632 Non-Euclidean Geometry (3)**
A study of non-Euclidean geometries with emphasis given to their logical development.
- MTH 6633 Advanced Linear Algebra (3)**
A study of linear and orthogonal transformations, orthogonal and unitary matrices, numerical linear algebra, and applications. Spectral theory and duality. *Prerequisite: MTH 3331 or permission of instructor*
- MTH 6640 Advanced Concepts of Analysis (3)**
A study from the classical theory of point sets in Euclidean space and the theory of functions of one or more real variables to topology, continuous functions, and Lebesgue integral and the Henstock integral. *Prerequisites: MTH 4425 or MTH 5525*

- MTH 6650 Trends in Technology and Problem Solving in Secondary Mathematics Instruction (3)**
 A comprehensive study of contemporary teaching strategies that incorporate current technologies and effective problem solving approaches for use by the mathematics educator in the modern secondary school mathematics program. Emphasis will be placed upon the effective use of calculators, writing, and computer software in the mathematics curriculum.
- MTH 6691 Research in Education (3)**
 A study of a variety of research and evaluations methods in the teaching of mathematics.

MUSIC

NOTE: Graduate students may not enroll in a 5500-numbered course if it duplicates the same course listed on an undergraduate transcript.

- MUS 5500, 5501, 5502 Selected Topics (1-3 credit hours per course)**
 A detailed investigation of a specialized topic of interest and importance. The area of investigation should be a topic not covered in regularly offered courses in the School of Music or an advanced section for intensive study. See semester hour limits listed under Course Restrictions in General Regulations section.
- MUS 5510-6647 Private Instruction in Performance (1)**
 Individual studies in performance are a vital part of any music curriculum. The graduate student in music education or conducting should, upon consultation with his/her adviser, elect to study in the areas most consistent with his/her personal needs and career goals. For the secondary school teacher, this may involve deeper exploration of instruments he/she does not play well. For the prospective junior college or college teacher, it will involve further study of his/her principal performing area. Graduate study in performance is through private instruction only.
- MUS 5510 - 6647 Private Instruction (1 credit hour per semester)**

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|-----------|-------------|
| 5510 | Violin |
| 5511 | Viola |
| 5512 | Cello |
| 5513 | String Bass |
| 5514/6614 | Piano |
| 5515/6615 | Organ |
| 5516/6616 | Voice |
| 5517/6617 | Clarinet |
| 5518/6618 | Oboe |

- | | |
|-----------|------------|
| 5519/6619 | Flute |
| 5520/6620 | Bassoon |
| 5521/6621 | Saxophone |
| 5522/6622 | Trumpet |
| 5523/6623 | Horn |
| 5524/6624 | Trombone |
| 5525/6645 | Euphonium |
| 5526/6646 | Tuba |
| 5527/6647 | Percussion |
| 5528 | Guitar |
- MUS 5543 History of the Band in the United States (3)**
 The history of the band in this country from the early military bands through town, industrial, church, professional, circus, fraternal, school, and college bands.
- MUS 5553 Techniques and Literature of Brass Instruments (3)**
 A study of the techniques of all the brass instruments, the use of extant methods and literature for developing these techniques, and their applicability in individual and group public school teaching situations.
- MUS 5554 Literature and Techniques of Sacred Music (3)**
 A comprehensive survey of materials and methods for use in sacred choral music programs.
- MUS 5562 Arranging for Band and Chorus (3)**
 This course covers arranging for football shows, concert work, special vocal and instrumental groups. Study of ranges, voicing, and balance. Short-cuts and techniques in reproducing parts.
- MUS 5571 Music for ECE and Elementary School (3)**
 A study of the materials and planning techniques for music in grades P-6. Singing, listening, movement, instrument playing, and creative activities will be explored. Multicultural elements, observation, teaching experiences, and practical application of ideas will be included.
- MUS 5582 Choral Techniques (3)**
 This course focuses on organizational and rehearsal procedures, choral tone, diction, and choral literature.
- MUS 5584 Band Techniques (3)**
 A study of rehearsal techniques, band pageantry, jazz band, instrument repair and music literature for band.
- MUS 6600 Instrumental Seminar (1)**
 This course covers rehearsal, evaluation and performance of band literature. Two semesters required of all instrumental music majors.

- MUS 6601 Choral Performance Seminar (1)**
A study of the rehearsal, evaluation and performance of choral literature. Two semesters required of all choral music majors.
- MUS 6605 Advanced Music Technologies (3)**
An advanced study of the applications of microcomputers for the music educator in the modern school music program.
- MUS 6606 The Repertoire of the Band (3)**
An intensive study of music for the band, including an historical overview and intensive score study of representative works.
- MUS 6607 Literature and Techniques for the Beginning Band (3)**
A selective survey of materials for beginning instrumental music programs. Techniques will be presented for recruiting and retaining students. Performance, listening, and analysis will be included.
- MUS 6608 Literature and Techniques for Volunteer School and Community Choruses (3)**
A study of music and methods for working with school, church, and community choral groups. Emphasis on materials suitable for performers with little previous training or experience.
- MUS 6609 Choral Literature (3)**
A comprehensive survey of music for the choral medium.
- MUS 6610 Woodwind Instruments and Their Literature (3)**
A study of teaching techniques and materials for the bassoon, clarinet, flute, oboe, and saxophone.
- MUS 6611 Materials and Techniques for the Intermediate Band (3)**
A comprehensive survey of the literature for the intermediate band program. Criteria for selecting and evaluating methods will be developed and new approaches to instruction presented.
- MUS 6612 Techniques for Modern School Band (3)**
An intensive study of the administration, materials, organization, and teaching techniques of school instrumental music programs.
- MUS 6613 Strategies for Performance Preparation (3)**
The investigation and diagnosis of the five elements that constitute an outstanding musical performance: tone, intonation, rhythm, technique, and interpretation. Emphasis will be placed upon teaching and achieving the style, phrasing, balance, dynamics, nuance,agogics, note leading, and interpretative articulation.
- MUS 6614-6647 Private Instruction in Performance (1)**
Private instruction in performance. Students in the conducting program will be required to take two hours of performance instruction.
- 6614 Piano**
- 6615 Organ**
- 6616 Voice**
- 6617 Clarinet**
- 6618 Oboe**
- 6619 Flute**
- 6620 Bassoon**
- 6621 Saxophone**
- 6622 Trumpet**
- 6623 Horn**
- 6624 Trombone**
- 6645 Euphonium**
- 6646 Tuba**
- 6647 Percussion**
- MUS 6625, 6626, 6627 Specialized Study in Area of Music (1-3 credit hours per course)**
A study of a problem or problems using research techniques. Selection of problems must be approved by the student's adviser, instructor under whom the study is to be made, and the appropriate Director of the Graduate School. Study should contribute to student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed six semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- MUS 6631 Advanced Conducting I (3)**
A study and conducting of a sequence of music which provides opportunities for appropriate skill development. Students will be evaluated and assigned materials suitable for their area of specialization. Choral students will work individually with the Director of Choral Activities, and instrumental students will work individually with the Director of Bands in addition to regular class lectures.
- MUS 6632 Advanced Conducting II (3)**
Selection, study, and conducting of specific repertoire in preparation for an individual conducting recital (MUS 6633). Individualized study and research of a coherent group of compositions appropriate for a performance. Choral students will work individually with the Director of Choral Activities, and instrumental students will work individually with the Director of Bands in addition to regular class lectures.
- MUS 6633 Conducting Recital (1)**
Graduate students in conducting, upon com-

- pleting MUS 6631 and 6632, with the approval of their adviser and conducting mentor, will present and conduct a 30-minute recital with an appropriate vocal or instrumental ensemble. The performance will be videotaped for post-recital evaluation and final approval by the graduate conducting faculty.
- MUS 6635 Pedagogy of Music History, Theory and Musicianship (3)**
A study relating musical historical and theoretical concepts to the secondary school performance and general music class. Consideration of separate music theory and appreciation classes as secondary level subjects. Study of the concept of comprehensive musicianship as a point of departure for the modern music education curriculum.
- MUS 6636 Conducting and Score Analysis Techniques (3)**
A concentrated study of conducting patterns, gestures, and techniques. Score study through the coordinated application of music theory and history. Special emphasis will be placed on interpretation and the development of aural analysis skills.
- MUS 6637 The Heritage of the March (3)**
A historical and analytical survey of marches for the concert band. Marches for groups of all ability levels will be presented and discussed. Performance, listening and historical background will be included.
- MUS 6650 Band Adjudication (3)**
An intensive study of concert, marching, jazz band, and solo-ensemble adjudication and the requirements leading to certification.
- MUS 6662 Advanced Instrumental Arranging (3)**
A study of advanced arranging and scoring concepts for instrumental ensembles. Study of contemporary harmony, voicing, scoring methods, and their applications to various ensemble groupings.
- MUS 6670 Practical Band Instrument Repair (3)**
This course covers the maintenance, repair and supervision of equipment used by modern music educators. Exploration of industry guidelines and evaluation of financial restraints on music programs. System and rationale for evaluating equipment will be developed.
- MUS 6691 Research and Evaluation in Music Education (3)**
A study and evaluation of a variety of research methods, types of reporting, analysis of standardized tests and construction of teacher-made tests. Required of all graduate music majors.

- MUS 6695 Thesis (3)**
Three hours may be applied toward fulfilling degree requirements when approved by the student's adviser and the Dean of Graduate Studies and Research.

- MUS 6696 Practicum (1-3 credit hours)**
Supervised experiences related to instruction in music education. Application of skills, concepts and principles acquired in previous courses will be emphasized.

MASTER OF SCIENCE IN NURSING

[Course credit hours/contact hours (if different) per week are noted in parentheses]

- NSG 5504 Theories in Nursing (2)**
Explores the evolution and importance of knowledge and theory in nursing, mechanisms for developing and critiquing theory, and the analysis and application of theories in nursing practice. F
- NSG 5505 Healthcare Economics (2)**
An introductory course in health economics, designed to provide the student with the elements of economic analysis as applied to the area of healthcare. F
- NSG 5506 Curriculum Development in Nursing Education (2)**
Provides content and learning experiences that enable students to understand all phases of the curriculum development process. Explores principles of curriculum development and major historical influences on nursing curricula. Includes in-depth analysis of the basic components and determinants of curriculum development as well as the concepts of balance, continuity, and sequence. Su
- NSG 5507 Issues in Women's Health (2)**
Focuses on issues and trends in women's health including both consumer and provider issues. Emphasizes the current status of women in the healthcare system. Su
- NSG 5510 Power, Politics, and Policy Formulation in Nursing (2)**
Analysis of the relationship of power, politics, and policy formulation to nursing and healthcare. Su
- NSG 5512 Advanced Health Assessment (3)**
Designed to prepare the nurse student as an expert clinician in health assessment of patients across the lifespan. Advanced content in history and interviewing processes, physical examination, and documentation of assessment findings are included. The clinical diagnostic process is emphasized. *Corequisite: NSG 5513.* F, Sp

- NSG 5513 Advanced Health Assessment Preceptorship (3/9)**
Preceptorship course designed for clinical application of skills in advanced health assessment, clinical diagnosis and management, and health promotion, maintenance/disease prevention role of the primary care family nurse practitioner. *Prerequisites: NSG 6671 and 6649. Corequisite: NSG 5512.* Sp
- NSG 5515 CNS Advanced Health Assessment Practicum (1/2)**
The clinical laboratory course is designed to review and expand skills and expertise in health assessment. Successful completion requires validation of knowledge and skills needed to perform complete health assessment of individuals. *Corequisite: NSG 5512.* F
- NSG 5520 Foundations of Information and Communication Technologies (2)**
This course prepares students with fundamental skills for effective electronic communication; and finding, evaluating and using scholarship information in the academic and nurse practice settings and life-long learning.
- NSG 6614 Role of the Nurse Educator (2)**
Provides a forum for the analysis and synthesis of role behaviors specific to the nurse educator. Emphasis is on the role of the nurse educator, patterns of nursing education, nursing curricula, instructional design, and professional, social, and political issues influencing nursing education. *Prerequisite: NSG 5504, 6660, 6691, 6692 and clinical specialty courses. Corequisite: NSG 6615.* Sp
- NSG 6615 Nursing Education Internship (3/12)**
The course provides the student opportunities to apply the theory of curriculum and learning theory basic to instructional design to nursing education. Involves supervised experience in the role of the nurse educator. *Prerequisite: NSG 5504, 6660, 6691, 6692 and clinical specialty courses. Corequisite: NSG 6614.* Sp
- NSG 6616 Role of the Nursing Administrator (2)**
Culminating course which assists students to evaluate the role of the nurse administrator, analyze issues and trends in nursing administration, and design strategies for resolution of issues and conflicts within the functional role. *Prerequisites: NSG 5504, 6660, 6691, 6692 and clinical specialty courses. Corequisite: NSG 6617.* Sp
- NSG 6617 Nursing Administration Internship (3/12)**
A culminating course which provides the student an opportunity to study and practice in the nursing administration role. *Prerequisites: NSG 5504, 6660, 6691, 6692 and clinical specialty courses. Corequisite: NSG 6616.* Sp
- NSG 6620 Advanced Acute Care Nursing of Adults (2)**
The adult health nursing specialist's role in the acute care setting. Theories, concepts, issues and trends relative to nursing care of the adult in the acute care setting. *Prerequisites: NSG 5504, 5512, 5515, 6671, 6692. Corequisites: NSG 6621, 6660 and 6691.* Sp
- NSG 6621 Advanced Acute Care Nursing Preceptorship (3/9)**
Clinical preceptorship in adult health nursing in acute care. *Corequisite: NSG 6620, 6660 and 6691.* Sp
- NSG 6622 Advanced Long-Term Nursing Care of Adults (2)**
The nursing specialist's role in long-term care. Theories concepts, issues, and trends relative to nursing care of the adult with long-term healthcare needs. *Prerequisites: NSG 6620, 6621. Corequisite: NSG 6623, 6649.* F
- NSG 6623 Advanced Long-term Nursing Care of Adults Preceptorship (3/9)**
Clinical preceptorship in adult health nursing in long-term care. *Prerequisites: NSG 6620, 6621. Corequisites: NSG 6622 and 6649.* F
- NSG 6625, 6626, 6627 Specialized Study in Advanced Nursing (1/4)**
Under supervision of a faculty member, student may pursue study in selected area applicable to the practice of nursing which fits his/her academic needs but is not available in the regular curriculum. Total credit for any combination of enrollments in these courses may not exceed four semester hours. F, Sp See semester hour limits listed under Course Restrictions in General Regulations section.
- NSG 6631 Computer Based Communication (3)**
An examination of communication technologies in the context of the healthcare delivery environment. Issues and applications addressed include hardware and software basics, file management, the Internet and the World Wide Web, electronic communication, and security. F
- NSG 6632 Theoretical Foundations of Nursing Informatics (2)**
Explores the foundations of nursing informatics, related theories and sciences. Identifies nursing and healthcare data sets, classification systems, and nomenclatures utilized in practice. *Corequisite or Prerequisite: NSG 5504.* F

NSG	6633	<p>Systems Analysis and Design (3) Explores the planning, analysis, design, implementation, and evaluation of clinical information systems. Includes strategies for developing a strategic plan and issues in project management along with major design and implementation issues. Various methods for the evaluation of outcomes of clinical information systems are critiqued. <i>Prerequisites: NSG 6631, 6632. Sp</i></p>	<p>physiological and psychosocial concepts and theories which form the basis of nursing management are identified and evaluated. <i>Prerequisites: NSG 6640, 6641. Corequisites: NSG 6643, 6649. F</i></p>
NSG	6634	<p>Role of the Nursing Informatics Specialist (1) Focuses on the nursing informatics specialist's role in the healthcare environment. Emphasizes concepts, research, issues, and trends relative to the practice of the nursing informatics specialist. <i>Prerequisites: Completion of nursing specialty courses for Nursing Informatics Specialist. Corequisite: NSG 6636. Sp</i></p>	<p>High-Risk Maternal/Infant Health Nursing Preceptorship (3/9) Provides the student the opportunity to apply advanced knowledge and theories to the care of mothers and infants experiencing deviations from normal processes. <i>Prerequisites: NSG 6640, 6641. Corequisites: NSG 6642, 6649. F</i></p>
NSG	6635	<p>Integration of Technology in Information Exchange (3) Prepares students with knowledge and skills to generate and distribute information through computer-based applications. Proficiencies with electronic presentations, Web-based documents, and multiple file formats for information exchange are incorporated in learning activities. <i>Prerequisite: NSG 6631. F</i></p>	<p>Family and Cultural Theory in Advanced Nursing Practice (3) The purpose of this course is to provide the student with in-depth knowledge of family and cultural assessment. Further analysis of diverse cultures and multi family structures will enhance the student's application of advanced nursing interventions. Su</p>
NSG	6636	<p>Nursing Informatics Internship (4/16) Facilitates the application of nursing and information systems theory to practice environments. Students participate in relevant clinical practice with a health or nursing information technology expert. <i>Prerequisites: Completion of nursing specialty courses for Nursing Informatics Specialist. Corequisite: NSG 6634. Sp</i></p>	<p>Advanced Pharmacology (3) Presents knowledge and theory critical to management of the pharmacological needs of a variety of populations. Discusses major classification of drugs and protocols for administration. F</p>
NSG	6640	<p>Advanced Maternal/Infant Health Nursing (2) Focus is on the knowledge and theory base critical to advanced practice in maternal/infant health nursing. The primary emphasis is the normal processes of childbearing and neonatal health. <i>Corequisite or Prerequisite: NSG 5504, 5512, 5515, 6671, 6692. Corequisites: NSG 6641, 6660 and 6691. Sp.</i></p>	<p>Synthesis and Evaluation of Advanced Nursing Practice (1) Presents students with information concerning structure and format of the comprehensive examination. Focuses on the critical thinking and communication skills integrated throughout the curriculums which are the functional base of the professional role. <i>Prerequisites: NSG 5504, 6660, 6691, 6692 and clinical specialty courses. Sp</i></p>
NSG	6641	<p>Advanced Maternal/Infant Nursing Preceptorship (3/9) The purpose of this course is to provide the student the opportunity to incorporate advanced knowledge and theories into the nursing care of childbearing families. <i>Corequisites: NSG 6640, 6660, 6691. Sp.</i></p>	<p>Adaptation of FNP Role (1) Presents the conceptual and theoretical base of the advanced practice role of the family nurse practitioners. Sp</p>
NSG	6642	<p>High-Risk Maternal/Infant Health Nursing (2) Focuses on the nursing management of the high-risk client and family. The advanced</p>	<p>Foundations of Advanced Practice (2) Focuses on the advanced practice nurse's role in healthcare. Emphasizes the theoretical bases critical to leadership in the advanced practice role. Sp.</p>
			<p>Primary Care I (3) Focuses on advanced knowledge and theory base in the assessment and care of children and women of child-bearing age. Health promotion is emphasized, but the practitioner is also prepared to deliver complex multifaceted care to clients in home, acute, and rehabilitative settings. <i>Prerequisite: NSG 5512 and 5513. Corequisite: NSG 6666. Su</i></p>
			<p>Primary Care I Preceptorship (3/9) Clinical course in the advanced practice role</p>

of the family nurse practitioner with pediatric clients and women of childbearing age in primary care settings. *Prerequisites:* NSG 5512, 5513, 6649, and 6671. *Corequisite:* NSG 6665. Su

NSG 6667 Primary Care II (3)
Focuses on advanced knowledge and theory base in the assessment and management of care of adult and gerontologic clients in primary care settings. *Prerequisites:* NSG 6665, 6666. *Corequisite:* NSG 6668. F

NSG 6668 Primary Care II Preceptorship (3/9)
Clinical preceptorship course in the advanced practice role of the family nurse practitioner with adult and gerontological clients in the primary care settings. *Prerequisites:* NSG 6665, 6666. *Corequisite:* NSG 6667. F

NSG 6670 Role Synthesis Seminar (1)
Provides a forum for the analysis and synthesis of role behaviors specific to the family nurse practitioner. Emphasis is on the role, patterns of health promotion, primary care, and professional, social, and political issues related to the role. *Prerequisite:* All core and clinical courses. *Corequisite:* NSG 6680. Sp

NSG 6671 Advanced Pathophysiology (3)
Provides an in-depth study of pathophysiologic processes to correlate changes that occur at the cellular and system level with the development, clinical manifestations, and management of various disease states. F

NSG 6680 Family Nurse Practitioner Internship (5/20)
Internship course designed to provide extensive clinical experience with a broad spectrum of clients to allow students opportunities to strengthen clinical skills in specific areas. *Prerequisite:* All core and clinical courses. *Corequisite:* NSG 6670. Sp

NSG 6691 Research Methodology (3)
Evaluates the principles of the research process for both quantitative and qualitative research. Emphasis is on the utilization and generation of research relevant to advanced nursing. (A grade of "B" or better is required.) Sp

NSG 6692 Data Analysis Techniques in Research (2)
Examines basic statistical methods for analyzing, interpreting, and evaluating data. The focus is on developing knowledge necessary to critically evaluate research reports and selected data. F

NSG 6695 Thesis (4 minimum)
Prerequisites: NSG 6691, 6692. Pass/Fail. F, Sp, Su

NSG 6696 Scholarly Inquiry Practicum I (1-2)
Faculty-guided experience to further develop the student's knowledge of a special area of interest utilizing research-based inquiry. *Prerequisites:* NSG 6691, 6692. F

NSG 6697 Scholarly Inquiry Practicum II (1-2)
Faculty-guided experience for implementation and evaluation of student's scholarly inquiry. *Prerequisite:* NSG 6696. Sp

Thesis Option

Students who plan to progress to doctoral education will be encouraged to pursue the thesis option in preparation for the doctoral dissertation. Students should discuss with their adviser the option prior to filing their degree plan.

PUBLIC ADMINISTRATION

PA 6601 Research Methods in Public Administration (3)
An introduction to basic, applied, and evaluative research methodologies and data analysis techniques. Students apply these methodologies to issues, programs, and research problems in the field of public administration. A grade of "B" or better is required.

PA 6602 Quantitative Methods in Public Management (3)
An introduction to the fundamental concepts of descriptive and inferential statistics including bivariate analyses and parametric and nonparametric statistical techniques.

PA 6603 Economics for Public Management (3)
An introduction to economic theory emphasizing the application of selected microeconomic and macroeconomic theories to issues in public administration.

PA 6610 Foundations of Public Administration (3)
An overview of the history and intellectual foundation of public administration including the major ideas, developments, theories, concepts, and contributors to the growth of public administration and its practice in the United States. The student is introduced to the case analysis method.

PA 6620 Theory of Organizations (3)
An introduction to the major theoretical approaches and debates in organization theory including core concepts and key issues arising from the classical and contemporary influences. Emphasis is on the evolution of organization theory in the United States and the elements that distinguish public from private organization.

PA 6622 Public Policy (3)
The study of the theoretical orientations underlying the public policy process and the

- conceptual framework for differentiating types of public policies. Students examine current issues and policies from various theoretical and practical perspectives.
- PA 6624 Public Human Resource Management (3)**
A survey of the basic principles and functions that include planning, work analysis, position classification, job specifications, recruitment, staffing, performance management and appraisal, labor-management relations, training, and other personnel functions. Topics include statutory and regulatory constraints and outsourcing and privatization.
- PA 6625 Specialized Study in Public Administration (3)**
Study of problem(s) in a public or nonprofit organization using research design and methodologies and producing a scholarly paper that contributes directly to the student's curriculum. The student's faculty adviser or the Director of the MPA Program must approve the topic. The specialized study may substitute for a required core course only once in a student's program and only if taken for three credit hours. See semester hour limits listed under Course Restrictions in General Regulations section.
- PA 6630 Strategic Planning (3)**
The study and application of decision making models with emphasis on understanding the role and importance of strategic planning in public and nonprofit organizations.
- PA 6631 Program Evaluation (3)**
An overview of the theoretical foundations and techniques of program evaluation including need assessments, outcome evaluations, surveys, and program outcome(s) and impact evaluation (s).
- PA 6640 Intergovernmental Relations (3)**
The administrative, fiscal, and legal issues that govern relations among the various governmental entities in the United States.
- PA 6644 Administrative Law (3)**
An overview of the legal environment of public administration. The focus is on the powers and procedures of administrative agencies including administrative discretion, rule-making, investigations, prosecuting, negotiating and settlement based on Constitutional law, statutory law, common law, and agency-made law and the liability of governments and their officers.
- PA 6645 Managing Government Contracts (3)**
An overview of the principles, legal aspects, processes, and strategies of contract management in public and nonprofit organizations.
- PA 6646 Organizational Behavior (3)**
The study of the various theoretical perspectives that help to explain complex organizational behavior in public and nonprofit organizations in the global environment including motivation, diversity, group dynamics, communications, power, conflict, culture, and change.
- PA 6647 Advanced Contract Administration (3)**
Examination of the current processes, procedures, standards, issues and problems in planning, managing, auditing, and evaluating contract performance.
- PA 6648 Contract Negotiation (3)**
This course focuses on management of the overall contract negotiation process and examines the basics of negotiation, including the procedures, processes, psychology, and skills. These contract negotiation processes are applied to the defense contracting framework. Perspectives of both government and commercial interests are explored.
- PA 6649 Government Contract Law (3)**
This course focuses on legal aspects of government contracting. Procurement laws and federal acquisition regulations are examined to serve as a basis for development of case methods. The case methods are used in this course to emphasize legal procedures and logic. The course highlights the significance of the legal process for practicing public administrators.
- PA 6650 Governmental Budgeting and Financial Management (3)**
A survey of concepts, principles, processes, and practices in governmental budgeting at national, state, and local levels and the interrelationships of planning, programming, and budgeting strategies.
- PA 6660 Readings in Public Administration (1-3)**
Readings and studies in public administration related to the student's unique needs with the approval and guidance of the adviser. This course may not be substituted for a required core course. See semester hour limits listed under Course Restrictions in General Regulations section.
- PA 6665 Leadership in Public Administration (3)**
A survey of leadership theories, styles, and strategies in the contemporary public and nonprofit workplace.
- PA 6666 Foundations of Nonprofit Organizations (3)**
A survey of the history, theory, and political, organizational, legal, financial, personnel, and service contexts unique to nonprofit management.

- PA 6667 Executive Leadership in Nonprofit Organizations (3)**
 Managerial tools and professional practices for developing the internal and external capacity of nonprofits. Topics include working with boards, volunteers, and communities; developing partnerships with public, private and other nonprofit organizations; marketing the program; planning special events; and influencing policy directions through lobbying.
- PA 6668 Grant Management for Public and Nonprofit Organizations (3)**
 An overview of strategies and techniques integral to identifying potential funding resources and planning, developing, and writing grant proposals. Topics include program development and grant opportunities, the funding acquisition processes, stewardship of funds, and project management strategies including evaluation, dissemination, and continuation plans.
- PA 6669 Nonprofit Financial Management (3)**
 The study of cash management and investment strategies for nonprofit managers. Topics include traditional banking and cash flow functions and financial strategies managing excess cash, endowment, long-term gifts, borrowing, risk management, benchmarking, and long term planning.
- PA 6674 Ethics in Public Administration (3)**
 A study of the philosophical and practical issues related to ethical decision making in the public sector. Emphasis is on the analysis of ethical problems and the development of analytical skills and values framework to act ethically in public service roles.
- PA 6679 Computers and Government Management Information Systems (3)**
 Conceptual and practical foundations of information processing systems, support for management, and decision-making functions in government. Topics include computer systems, project management, the economic and legal consideration of managing, implementing, and evaluating information systems.
- PA 6694 Internship (3)**
 A practical learning experience in a public or nonprofit organization that includes a written paper analyzing a problem pertinent to the student's concentration. The Internship cannot be used to satisfy an elective or core course requirement. Pass/Fail grade.
- PA 6699 Capstone in Public Administration (3)**
 The required outcome assessment course using case analyses, papers, and/or computer simulations that emphasize the application of analytical skills and knowledge gained from curriculum courses to administrative,

organizational, and policy problems. Students take the Capstone course as the final core course or, with the approval of the instructor, in conjunction with the final core course in the MPA program. To successfully complete this course, the student must achieve a grade of "A" or "B."

NOTE: Courses from disciplines other than Public Administration (CJ, HRM, MAN, IR, PSY, EBSEBS, and EDU) used as PA concentration selections are described in the bulletin sections pertaining to those programs.

PHYSICS

- PHY 5500 Topics in Physics (3)**
 This course focuses on selected topics in the field of physics. These may include geophysics, biophysics, nuclear power and waste, relativity, health physics, astrophysics, mathematical methods in physics, particle physics.
- PHY 5510 Modern Physics (3)** Special relativity, quantum mechanics, and many electron systems. *Prerequisites: MTH 1125 and PHY 2253, L253 or PHY 2263, L263. Corequisite: PHY L510*
- PHY L510 Modern Physics Laboratory (1)** Selected experiments in modern physics. *Corequisite: PHY 5510*
- PHY 5511 Advanced Modern Physics (3)** Foundations of statistical physics, solid state physics, nuclear physics, elementary particles, astrophysics, and cosmology. *Prerequisites: PHY 5510*
- PHY 5520 Mechanics (3)**
 A study of the kinematics and dynamics of particles and systems of particles.
- PHY 5530 Electromagnetic Fields (3)**
 A study of vector fields, dielectric and magnetic media, fields in conductors, electric and magnetic circuit elements. Maxwell's equations and boundary condition problems in one, two and three dimensions.
- PHY 5559 Optics (3)**
 The principles of geometrical and physical optics. Image formation, refraction, diffraction, origin of spectra, polarized light, and optical activity. *Prerequisite: PHY 2253 and L253 OR PHY 2263 and L263; Corequisite: PHY L459*
- PHY L559 Optics Laboratory (1)**
 Selected experiments in geometric and physical optics. Laboratory work emphasizes the basic principles of optics, the use of measuring instruments, and the interpretation of data. *Corequisite: PHY 4459*

- PHY 5591 Guided Independent Research (1)**
A laboratory based physics research project under the direction of a faculty member. The project must culminate in a written report with the results presented at a department seminar.
- PHY 5593 Guided Independent Study (3)**
An independent study for advanced students under the direction of a faculty member.
- PHY 6600 Advanced General Physics (3)**
This course explores the scientific view of the world as it has developed from the earliest theories of Aristotle, Euclid and Newton to modern theories such as Einstein's relativity and quantum mechanics. *Prerequisite: Eleven hours of college physics or permission of instructor.*
- PHY 6625, 6626, 6627 Specialized Study in Area of Physics (1-3)**
A study of a problem or problems using research techniques. Selection of a problem must be approved by the professor under whom the study is to be made and the Dean of Arts and Sciences. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.

- POL 5533 Comparative Government (3)**
Comparative analysis of major world power governments with emphasis upon comprehension of differences which lead to international tensions.
- POL 5551 International Relations (3)**
Analysis of contemporary world politics, including structures and processes through which states interact, power politics, geopolitics, regional alliances, and psychological warfare.
- POL 6625, 6626 Specialized Study in Area of Political Science (1-4)**
Study of problem or problems using research techniques. Selection of problem must be approved by student's adviser, professor under whom study is to be made, and Dean of the Graduate School. Study should contribute to student's program. Preparation of scholarly paper required and may involve oral defense. Total credit for any combination of enrollments in these courses is not to exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- POL 6665 Reading in International Relations (3)**
Guided program of reading and study of international relations. Should be related to student's needs and have approval of adviser. See semester hour limits listed under Course Restrictions in General Regulations section.

POLITICAL SCIENCE

- POL 5520 The Vietnam War (3)**
Study of the period 1946 to 1975 in Indochina with emphasis on American involvement during and after the French colonial period, escalating involvement of the Kennedy and Johnson administration, and Vietnamization and withdrawal under President Nixon.
- POL 5523 U.S. Diplomatic History (3)**
Study of factors, forces, and functions in making of American foreign policy. Includes description and analysis of principal developments in U.S. and interactions with other countries from 1760s to 1941.
- POL 5524 Contemporary American Foreign Policy (3)**
Analysis of American role in the world since Pearl Harbor, nature and significance of current American foreign policy, rationales and suggested alternatives, and policy-making process.

POST SECONDARY EDUCATION

- PSE 6606 Current and Emerging Instructional Technologies (3)**
This course focuses on current and emerging instructional technologies. The emphasis of this class is on the instructional use of production software, desktop publishing, graphics, hypermedia, on-line services, optical technology, and telecommunications. *Prerequisite: PSE 6605 or permission of instructor.*
- PSE 6608 Curriculum Integration of Technology (3)**
The purpose of this course is to prepare students to apply knowledge and competency in instructional technologies in relation to curriculum design, diverse models, and teaching situations at all developmental levels. Included is evaluation of software, audio/visual production, and instructional design using technology as a basis for instruction.
- PSE 6612 Community Junior College (3)**
This course covers the rise and development of the community or junior college in

American education, its philosophy and functions with specific attention to the transfer, terminal, and community service functions. Problems of organization, curriculum construction, staffing and instructional procedures are stressed.

PSE 6615 Social and Philosophical Foundations of Education (3)

This course provides an exploration of societal structures and problems and their interrelationship with education. It also provides an overview of philosophies and educational theories.

PSE 6642 History of Education (3)

A consideration of the development of educational ideas and institutions from ancient times to the present. Emphasis placed on Western Europe and the United States.

PSE 6651 Comparative Education (3)

This course is a comparative in-depth study of representative school systems in the world. Particular attention is given to comparison of merits and issues of the systems in terms of governance and structure of education as well as an exploration of the best educational practice that can be learned from each.

PSE 6653 Educational Evaluation (3)

The course presents basic procedures used in evaluation. A major focus is on planning and constructing teacher-made tests and non-test evaluation techniques. Also includes study of a variety of standardized tests.

PSE 6658 Understanding Cultural Diversity (3)

The focus of this course is on understanding culturally different students, the psychological and sociological factors that influence the teaching or training.

PSE 6660 Trends and Issues in Adult Education (3)

This course focuses on current trends in adult education. It includes a comprehensive investigation of current issues in adult education and an examination of how historical events and ideas have influenced those issues and trends. Special emphasis will be given to the analysis of trends and issues and formation of judgments based on supportable information.

PSE 6665 Field Project in Post Secondary Education (3)

This course helps students make connections between theoretical knowledge and practical situations. The content of this course is variable, depending on the individual student's interests, present situation, and future plans. The determination of the content for each student will be made through collaboration between the student, the student's adviser,

and the instructor of the course. Students may focus on supervised teaching, action research, or a project with a major field agency. *Prerequisites: This course is open only to students enrolled in the Masters of Science in Post Secondary Education program who have completed 18 hours of coursework including the research class.*

PSE 6670 Psychological Foundations of the Adult Learner (3)

An in-depth study of research findings and psychological concepts related to the nature of adult learners and learning processes; principles of motivation, effective instructional design geared toward adult learners; and social and cultural influences on adult learning. Emphasis will be given to the understanding of critical and variable attributes of adult learners.

PSE 6680 Curriculum Development for Adult Education (3)

A study of concepts, learning theories, materials, and media related to curriculum and program development in adult education.

PSE 6691 Research Methodology (3)

The study and evaluation of research methods commonly used in the social sciences. The course will provide information necessary to understand and apply research processes, synthesize knowledge and writing, and plan and organize research problems for interpretation and application of research results. Application of these skills in the form of a written project using the Publication Manual of the American Psychological Association (APA) is required. A grade of "B" or better is required.

PSE 6694 Special Problems in Adult Education (1-3)

The study of problem or problems using research techniques. Selection of problem to be approved by student's adviser and instructor under whom study is to be made. Study should contribute to student's program. Preparation of scholarly paper or project required and may involve oral defense.

PSE 6695 Thesis (3-6)

The thesis must be related to both the students' concentration area and post secondary education. Information regarding thesis guidelines and requirements may be obtained from the Graduate School office.

PSE 6696, 6697, 6698 Practicum in Area Post Secondary Education (1-3)

Supervised experiences related to instruction in post secondary education. Emphasis on application of skills, concepts, and principles acquired in previous courses. *Prerequisite: Completion of coursework and approval of adviser is required.*

PSE 6699 Capstone in Post Secondary Education (3)
 This course is a culminating experience that helps students integrate and apply the knowledge they have gained through their previous coursework. Emphasis is placed on challenging students to view the post secondary educational process from many perspectives. Students complete field experiences appropriate to their concentration areas and analyze case studies drawn from real-life situations. Students also create a personal philosophy of post secondary instruction. *Prerequisites: This course is open only to students enrolled in the Master of Science in Post Secondary Education program. Students may take this class only during their last two semesters of coursework*

PSYCHOLOGY

PSY 5501 Psychological Tests and Measurements (3)
 The selection, evaluation, administration, scoring, interpretation and use of tests of intelligence, proficiency, interests, personality, aptitude and social adjustment. *Prerequisite: graduate standing*

PSY 5520 Physiological Dynamics of Alcohol and Other Drugs (3)
 A study of physiological and psychological dynamics and resultant behavioral implications in use of alcohol and other drugs. Based on assessment of dynamics and behavior and application of diagnostic procedures using appropriate manuals and materials.

PSY 5556 Gerontology (3)
 The study of aging. Emphasis on biomedical, psychological, and social aspects of middle and late adulthood.

PSY 5559 Applied Behavior Analysis (3)
 Training and experience in design, execution, and evaluation of behavior modification programs for professionals in fields of counseling, education, rehabilitation and psychology. Provides study of key concepts of classical and operant conditioning, as well as discussion and application of specific strategies building on conditioning principles.

PSY 6606 Interventions for Children and Adolescents (3)
 This course examines the behavioral characteristics of children and adolescents including their emotional, social, and cognitive behaviors. Emphasizes intervention, assessment, diagnoses, teaching, and prevention.

PSY 6613 Objective Personality Assessment (3)
 An introduction to objective personality

assessment. The student will learn basic administration, scoring procedures, and utilization of assessment results in clinical practice for various objective personality and temperament measures. Application of objective personality instruments and computer scoring will be explored. *Prerequisites: PSY 6645 or similar graduate course and PSY 6669 or similar graduate course*

PSY 6625, 6626, 6627 Specialized Study in Psychology (1-3)

A study of a problem or topic using research techniques or a guided program of readings. Preparation of a scholarly paper is required and may involve an oral defense. A specialized study may be substituted for only one required course or elective in a student's program. Approval by the student's adviser, the course instructor, and department chair is required. See semester hour limits listed under Course Restrictions in General Regulations section.

PSY 6631 Psychological Foundations of Education (3)

An overview of educational psychology, including research findings and philosophical concepts related to nature of learner and learning process; principles of motivation and educational evaluation; and educational concepts representing different schools of psychological theory. (Must make a "B" or better to apply toward any teacher certification program.)

PSY 6633 Advanced Psychology of Learning (3)

A study of the historical roots and contemporary principles and theories of human learning and their applications to educational practices. Emphasis of this course is on contemporary perspectives and developments; field and cultural influences on learning; and the relation of individual and group adjustment to school learning.

PSY 6635 Vocational Psychology and Career Development (3)

This course covers the procedures used in obtaining, organizing, integrating, and utilizing educational and occupational information including electronic media. Career development theories, scope of the world of work, decision making strategies and counseling for career development including information on the relationship between career choice and life style. Attention is given to the appraisal of interest, aptitude and personality measurements.

PSY 6636 Wechsler Scales (3)

An exploration of the theory, nature, and measurement of human intelligence. Techniques of administering the Wechsler scales are taught include but are not limited to the following: WAIS-III, WISC-III, WPPSI-R,

- WIAT, and WMS. The student administers, scores, and interprets test batteries and writes satisfactory reports. *Prerequisites: PSY 6645 and adviser approval.*
- PSY 6637 Stanford Binet and Others (3)**
This course requires the administration, scoring, interpretation and reporting of psycho-educational batteries, including Binet IV, Woodcock Johnson, PIAT, and Kaufman. This course will include measures of intelligence, academic achievement, adaptive behavior, behavior rating, and perceptual-motor skills. The primary focus will be upon those instruments commonly used in schools excluding the Wechsler scales. *Prerequisites: PSY 6645, PSY 6636, and adviser approval*
- PSY 6638 Philosophy of Cognitive Development (3)**
An investigation of educational philosophies and human development as they relate to cognitive development and teaching of thinking skills.
- PSY 6644 Bio-Psychology (3)**
A study of the physiological correlates of behavior focusing on the cells of the nervous system, the structure and functions of the nervous system, psychopharmacology, drug abuse, and research techniques.
- PSY 6645 Evaluation and Assessment of the Individual (3)**
The study of knowledge, understanding and skills necessary to obtain records, appraise information and write reports regarding individuals. Involves integration and use of data from interviews, standardized tests, scales, inventories, other procedures, including individual and group methods of assessment. *Prerequisites: PSY/EDU 6653, PSY 5501, or permission of instructor*
- PSY 6648 Theories of Personality (3)**
A critical analysis of major theories and systems of personality.
- PSY 6650 Practicum: Psychometry (3)**
This course provides field supervised experiences preparatory to the Internship in School Psychometry/School Psychology. At least 100 hours of prescribed experiences in school psychometry/psychology must be completed at approved schools (K-12) and must be supervised by an approved school psychometrist or school psychologist. *Prerequisites: PSY 6636 and PSY 6637*
- PSY 6653 Measurement and Evaluation (3)**
A study of basic statistical processes and measures used in education, counseling, and psychology. Analysis of a variety of standardized tests and measurement procedures including construction, use, and interpretation. Construction of teacher/counselor-made tests and measuring devices.
- PSY 6655 Internship: Psychology Assessment (6)**
This course will provide a clinical internship appropriate to the specialty and practice of psychological technician. Training will be six months in duration and consist of at least 500 hours, 250 of which hours must be in direct contact with patients/clients. The student will be supervised for at least one hour per each five hours of client contact. At least 60% of supervision will be provided by a licensed psychologist.
- PSY 6659 Cognitive and Behavioral Interventions (3)**
This is a study of the basic principles and techniques of cognitive and behavioral systems of intervention. Applications of these techniques are applied to the problems of children and adults in school, home, and clinic settings are presented.
- PSY 6662 Internship: Psychometry (3)**
This course includes at least 300 hours of prescribed experiences in school Psychometry, completed at approved schools (K-12), and supervised by an approved school psychometrist or school psychologist. *Prerequisites: PSY 6650 and approval of instructor*
- PSY 6664 Assessment of Disabling Conditions (3)**
This course covers client assessment in the rehabilitation process and knowledge and skills required by the counselor in order to provide quality services to the individual. *Prerequisite: PSY 6653 or permission of instructor*
- PSY 6668 Human Lifespan and Development (3)**
A study of the nature and needs of individuals at all developmental levels. Problems of human adjustment faced at all stages of development from conception through retirement, including adjustment issues in the home, school, work place, social groups, and retirement. An understanding of developmental crises in human behavior is also a goal of this course.
- PSY 6669 Behavior Pathology (3)**
A study of psychopathological disorders with emphasis on the psychological, social, and biological origins. The current classification system used by the American Psychiatric Association is used as a foundation. Diagnosis and treatment planning are emphasized.
- PSY 6670 Diagnosis and Treatment Planning (3)**
A course designed to assist mental health professionals in the understanding and appli-

cation of a multi-axial system (current edition of the Diagnostic and Statistical Manual). Also included is a comprehensive treatment planning strategy for development statements of behavioral symptoms, short-term objective, long term goals and therapeutic interventions. Psychopharmacology treatment interventions are covered. *Prerequisite: PSY 6669*

PSY 6688 Medical/Psychosocial Aspects of Disability (3)

A study of medical and psychological information related to the disabled persons and to their families. Aspects of personal and social adjustment will be emphasized.

PSY 6693 Psychological and Educational Statistics (3)

A study of variety of descriptive and inferential statistics commonly used in psychology and education. Emphasizes application of statistical methods to research design. *Prerequisite: ADE/CP/EDU 6691*

PSY 7700 Professional School Psychology (3)

This course provides a knowledge base specific to the professional practice of school psychology and includes legal and ethical issues, professional standards, models of service delivery, roles of the school psychologist, modern technology, and assessment. *Enrollment limited to Ed.S. students.*

PSY 7725, 7726, 7727 Specialized Study in Psychology (1-6)

Under supervision of faculty member selected by student and approved by adviser and faculty supervisor, student may pursue extensive study of particular area which fits his/her academic needs but is not available in regular curriculum. Department will establish guidelines for supervision and pursuance of study. See semester hour limits listed under Course Restrictions in General Regulations section.

PSY 7753 Internship: School Psychology (3-6)

At least 300 hours per three-semester-hour course of prescribed experiences in school psychology, completed at approved schools (K-12), and supervised by an approved school psychologist. The student is advised to check national and multi-state requirements for internship experiences. *Prerequisites: PSY 6650 and approval of instructor*

PSY 7754 Internship: School Psychology (3)

At least 300 hours per three-semester-hour course of prescribed experiences in school psychology, completed at approved schools (K-12), and supervised by an approved school psychologist. The student is advised

to check national and multi-state requirements for internship experiences. *Prerequisites: PSY 6650 and approval of instructor*

PSY 7755 Internship: School Psychology (3)

At least 300 hours per three-semester-hour course of prescribed experiences in school psychology, completed at approved schools (K-12), and supervised by an approved school psychologist. The student is advised to check national and multi-state requirements for internship experiences. *Prerequisites: PSY 6650 and approval of instructor*

PSY 7794 Field Project (3)

An independent study of a problem of a practical nature that is encountered in a field setting. A proposal for the study and a written report of findings must be approved by the student's advisory committee. The advisory committee may administer an oral examination covering the research findings.

PSY 7795, 7796 Thesis (3)

Independent research for and preparation of a scholarly paper related to a school psychology problem under the supervision of the student's advisory committee. A research proposal and the written paper must be approved by the student's advisory committee. The advisory committee will administer an oral examination covering the research findings.

READING

RED 5583 Language and Literacy III (3)

A study of the principles of assessment and evaluation for improving language and literacy learning for all learners at all levels (P-6). This course requires substantial field experiences in a P-6 setting.

RED 6603 Special Topics in Literacy (3)

An in-depth investigation of an approved topic designated by the instructor and the student for further research and exploration of a particular topic in literacy education.

RED 6625 Specialized Study in Area of Literacy (1-3)

A study of a problem or problems using research techniques. Selection of the problem must be approved by the student's adviser, the instructor under whom the study is to be made, the appropriate college dean, and the Dean of the Graduate School. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be

- substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.
- RED 6630 Directed Reading Practicum (3)**
This course is designed to provide the future teacher with directed practice in providing reading interventions to individual students or small groups of students in school settings. Experiences in the planning and preparation of lessons, modification of lesson procedures, and materials to fit student needs and the ongoing evaluation of student progress are included.
- RED 6643 Trends in Children's and Young Adult Literature (3)**
A study of literature at the elementary, middle, and senior high levels. It includes reading the primary sources and studying the research and theory that support the use of children's and young adult literature in the classroom.
- RED 6660 Assessment for Teaching and Learning (3)**
A comprehensive study of the assessment process used in the P-12 classroom. Selection, administration, and analysis of norm-referenced, criterion-referenced, curriculum-based assessments instruments, and teacher-developed assessments used to determine the instructional needs of students and to plan intervention programs. Field experiences required.
- RED 6664 Literacy in the Content Area Grades K-6 (3)**
The examination of research-based methods and materials for teaching reading and writing in grades K-6. Field experiences required.
- RED 6670 Advanced Study of Literacy (3)**
This course prepares the student to examine the variables related to difficulties in learning to read printed material. Emphasis is placed on designing appropriate programs of improvement.
- RED 6671 Internship: Applying Research-Based Literacy Assessment and Instruction (2)**
Directed practice in administering assessments to guide instruction in the essential components of reading and writing. A minimum of 100 clock hours of clinical experiences. *Prerequisite: RED 6686 and formal admission to the Reading Specialist Program.*
- RED 6673 Literacy II (3)**
This course is designed as a survey in teaching reading applicable to nontraditional majors in Elementary/K-6 Collaborative pro-
- gram. Emphasis is placed on phonemic awareness, phonetic word attack, vocabulary, and reading comprehension. Field experience is required. Methods and materials are analyzed for potential use in the classroom. (*Alternative Fifth-year only.*)
- RED 6674 Literacy in the Content Areas Grades 6-12 (3)**
The examination of research-based methods and materials for teaching reading and writing in grades 6-12. Field experiences required.
- RED 6675 Literacy Instruction for Diverse Populations (3)**
A study of English language learners and culturally and academically diverse learners and an examination of appropriate instructional strategies for those learners. Field experiences required.
- RED 6678 Literacy and Multicultural Diversity (3)**
A course designed to help teachers explore the cultural values, language structures, and belief systems of the major racial, ethnic, and national groups found in today's classrooms. Specifically, methods, materials, and evaluation instruments and techniques which would maximize learning efficiency for these culturally diverse groups will be introduced. Children's literature and instructional activities that would increase self esteem and understanding of cultural diverse groups and their contributions to society will be explored.
- RED 6680 Organization of School Literacy Programs (3)**
This course covers the program, organization, and development of basic and supplementary materials for guiding teachers, faculties, and school systems in the continuous evaluation and improvement of curriculum and teaching practices. An in-depth examination of the varied roles of the reading specialist in literacy programs. *Prerequisite: Formal admission to the Reading Specialist Program*
- RED 6682 Internship: Developing Literacy Programs and Coaching Teachers (2)**
Supervised practice in modeling and managing effective literacy instruction and coaching teachers. Evaluating and designing school-wide needs assessments, literacy programs and environments, and professional development. A minimum of 100 clock hours of clinical experiences. *Prerequisite: Formal admission to the Reading Specialist Program. Corequisite: RED 6680*

RED 6683 Internship: Literacy Intervention (2)
Supervised administration and interpretation of instructional assessments to include screening, diagnosis, and progress monitoring with purposes of prevention, identification, and remediation of reading and writing difficulties. A minimum of 100 clock hours of clinical experiences. *Prerequisite: Formal admission to the Reading Specialist Program. Corequisite: RED 6660*

RED 6684 Curriculum Trends in Teaching Reading (3)
This course provides a study of theories and practices contributing to the knowledge base needed to improve reading achievement in grades K-12. The course examines how the writing process, writing across the curriculum and the use of media can be instrumental to student learning. This course is restricted to students enrolled in the Master's Degree in Reading Specialist.

RED 6686 Research-Based Literacy Assessment and Instruction (3)
An examination of research related to the essential components of the reading and writing processes and literacy assessment. Instructional practices, approaches, methods, and curriculum materials that support reading and writing. Field experiences required.

RED 7778 Teaching Reading to Culturally Diverse Groups Through Literature (3)
A course designed to help teachers explore the cultural values, language structure and belief systems of the major racial, ethnic, and national groups found in today's classrooms. Specifically methods, materials and evaluation instruments and techniques which would maximize learning efficiency for these culturally diverse groups will be introduced.

GENERAL SCIENCE

SCI 5503 Conservation (3)
The conservation of natural and human resources with emphasis on population expansion as the major element in a changing ecology.

SCI 5560 Science and Society (3)
A study of the social, political and economic implications of scientific discovery, innovation, and implementation. *Prerequisite: Twelve hours of coursework in science or permission of instructor*

SCI 5595 Selected Topics in Science (3)
Specialized topics not generally included in course offerings. Course may be taken

twice for a maximum of six hours toward degree requirements. *Prerequisite: Eight hours of coursework in science or permission of instructor.* See semester hour limits listed under Course Restrictions in General Regulations section.

SCI 6625, 6626, 6627 Specialized Study in Area of Science (1-4)

A study of a problem or problems using research techniques. Selection of a problem must be approved by the professor under whom the study is to be made and the Dean of Arts and Sciences. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed four semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.

SECONDARY EDUCATION

SED 5544 Internship Seminar (3)
This course provides interns an opportunity to develop analytical thinking skills through examining 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. This course must be taken concurrently with internship.

SED 6695 Secondary Internship Grades 6-12 (6)
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.

SOCIOLOGY

SOC 5517 Minorities in the U. S. Social Structure (3)
An analysis of the role of racial and cultural minorities in American society. Contributions of anthropology, sociology, and psychology to theories of minority/majority group relations.

SOC 5520 Sociological Theory (3)
An introduction to the area of sociological theory with emphasis on theorists, their works and contributions to modern socio-

SOC	5530	<p>logical theory.</p> <p>Social Problems in Contemporary Society (3) A study of the changing social structure, urban and rural problems, self-help and citizen participation, indigenous leadership and urban-rural fringe problems.</p>	<p>The course discusses the proper selection and application of tests and measurements in sport and fitness management. Practical and economical tests used by the sport and fitness managers will be examined.</p>
SOC	6625/6626/6627	<p>Specialized Study in Area of Sociology (3) A study of a problem or problems using research techniques. Selection of problem must be approved by the professor under whom the study is to be made and the Dean of the Graduate School. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve oral defense. Total credit for any combination of enrollments in these courses may not exceed six semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.</p>	<p>SFM 6610 Physical Education, Sport and the Law (3) The course is designed to provide students an awareness and understanding of basic legal responsibilities of sport managers and coaches.</p> <p>SFM 6615 Sport Administration (3) The study of the basic concepts, theories and organization of administration including financial management as applied to sport, physical education, recreation, and intramurals.</p> <p>SFM 6616 Sport Finance (3) This course is designed to provide students with information concerning advanced theory in finance, accounting, and managerial control of budgets.</p>
SOC	6630	<p>Advanced Gerontology (3) A graduate seminar on practical and methodological aspects of modern gerontology. Special emphasis is placed upon interdisciplinary, agency, and social intervention techniques for administrative and service workers with aged populations. The practical orientation of the seminar is designed to promote the development of professional skills in applied gerontology. <i>Prerequisite: SOC 3350.</i></p>	<p>SFM 6617 Readings in Sport and Fitness Management (3) An independent exploration of the literature and current research in sport and fitness management.</p> <p>SFM 6620 Physical Fitness: A Critical Analysis (3) The course involves an examination of the effects of physical activity on various fitness and health parameters by reviewing current research studies. Students will be introduced to methods of evaluating one's fitness level and the proper prescription guidelines.</p>
SOC	6631	<p>Social Deviation (3) A graduate seminar which focuses upon the social and cultural factors as they apply to deviance. The work of other disciplines in the study of deviation is reviewed and evaluated. Special emphasis is given to the different sociological approaches in the area of deviance; selected types of social deviation are examined and analyzed through these different sociological perspectives. The course is structured as a service course that has a pragmatic and interdisciplinary appeal to people in education, business, counseling, criminal justice and agency work, as well as to those who wish to further their training in sociology.</p>	<p>SFM 6623 The Biomechanics of Sports Techniques (3) The course explores the basic biomechanical concepts and their application in the analysis of sport technique.</p> <p>SFM 6625, 6626, 6627 Specialized Study in SFM (1-3) Study of problem or problems using research technique. Selection of problem must be approved by student's adviser, instructor under whom the study is to be made, and the appropriate Director of Graduate Studies. The study should contribute to the student's program. Preparation of a scholarly paper is required and may involve an oral defense. Total credit for any combination of enrollments in these courses may not exceed six semester hours. A specialized study may be substituted for a required course only once in a student's program. See semester hour limits listed under Course Restrictions in General Regulations section.</p>
SOC	6650	<p>Educational Sociology (3) The school is one of the chief agencies of socialization and a requisite of social order in complex societies. Special consideration is given to the works of anthropologists.</p>	
<hr/> SPORT AND FITNESS MANAGEMENT <hr/>			
SFM	6604	<p>Measurement and Evaluation in Sport & Fitness Management (3)</p>	<p>SFM 6632 Critical Issues in Sport and Fitness Management (3) This course focuses on the recognition, dis-</p>

		cussion, and systematic analysis of controversial issues and problems encountered in the conduct of professional activities in sport, fitness, health and physical education.			through group interactions.
SFM	6640	Sport Marketing (3) The purpose of this course is to teach the sports manager how to create a marketing plan. The emphasis is on following a ten-step procedure designed primarily for the non-profit sector and learning the theoretical base required to complete the process accurately and proficiently.	SFM	6690	Internship (3) A 400-hour supervised experience in planning, staging and evaluating a formal practicum in related field.
SFM	6650	Nutrition and Physical Performance (3) The course will examine the special dietary requirements of athletes, the importance of pre- and post-event nutrition, potential nutritional problems encountered by athletes and possible ergogenic foods and drugs.	SFM	6691	Research Methods in Sport and Fitness Management (3) This course examines the variety of research methods and reporting methods used in sport & fitness management research.
SFM	6670	Exercise and Disease Prevention (3) This course examines the scientific evidence in support of the beneficial effect of regular physical activity on reduced mortality from all causes - from diseases such as cardiovascular diseases, non insulin dependent diabetes mellitus and colon cancer, and from conditions such as obesity and high blood pressure.	SFM	6695	Thesis (3) The thesis must be related to an educational problem or situation within sport and fitness management. Information regarding the thesis program may be obtained from the Dean of the Graduate School.
SFM	6671	Exercise Through the Lifespan (3) This course will survey the effects of exercise and training programs on the growth and development of children and adolescents. It will also explore the effects of exercise on the physiological and psychological aspects of aging.	<hr/> SPECIAL EDUCATION <hr/>		
SFM	6672	Sport Psychology (3) The course is designed for the student with a vocational interest in athletic coaching within the educational environment. Psychological theories will be applied to the teaching of sports skills and the development of individuals into efficient team units.	SPE	6610	Research Trends and Issues in Special Education (3) This course is designed to provide advanced students with an in-depth study of significant research in special education. Specifically, this course focuses on (a) methodological issues that relate to descriptive research, intervention, research, case study, qualitative and longitudinal research, (b) issues in assessment and instrumentation and (c) ethical issues related to research in special education. The course is premised on the trend of recent changes in the discipline from a service orientation to one that is becoming more scientific.
SFM	6673	Ethics in Sport (3) The course examines ethical matters and issues relating to sport and physical activity.	SPE	6614	Adaptive Teaching Strategies for Students with Mild Disabilities K-6 (3) This course focuses on the characteristics of students with learning disabilities and attention deficit/hyperactivity as well as classroom-tested and research-based instructional strategies. Specifically this course provides strategies for adapting curriculum materials, teacher instruction, and student practice activities for both basic-skills and content area instruction. <i>Prerequisite: SPE 3340 or SPE 6640 (or equivalent)</i>
SFM	6674	Entrepreneurship in Sport (3) The course provides students with an awareness and understanding of basic concepts and problems in starting a business.	SPE	6615	Adaptive Teaching Strategies for Students with Moderate/Severe Disabilities K-6 (3) A comprehensive study of research, theoretical issues, diagnosis, and educational planning for those students with moderate/severe disabilities. Curriculum adjustment and differentiated instruction will be emphasized. <i>Prerequisite: SPE 3340 or SPE 6640 (or equivalent)</i>
SFM	6680, 6681, 6682	Practicum in Sport and Fitness Mgt. (1-9) A supervised application of the concepts, principles, and skills acquired by the students in previous course work. Problems in the area of financial management, personnel supervision, fitness management, sport management, and curriculum development will be identified. Students will explore and identify alternative solutions to problems	SPE	6616	Teaching Students with Emotional and Social Needs (3) This course will emphasize the behavioral, psychological, and social needs of the

learner who demonstrates emotional and behavioral disabilities that significantly impact their progress in the general education curriculum and in building and maintaining appropriate social relations with peers and adults. Appropriate intervention strategies used to increase appropriate social behavior and decrease inappropriate social behavior will be studied. *Prerequisite: SPE 3340 or SPE 6640 (or equivalent)*

SPE 6630 Collaboration for Inclusion (3)
This course is designed to provide advanced students with an in-depth study of current literature and research on collaboration and consultation as a service delivery model to meet the challenge of educating students with disabilities in the regular classroom. Specifically, this course focuses on collaborative-related issues for teachers who work with students with disabilities. The course is premised on the federal mandate that requires educators to employ the interactive framework established by PL 94-142 (now IDEA) to assure that all students are educated in the least restrictive environment. *Prerequisite: SPE 3340 or SPE 6640*

SPE 6631 Legal Issues in Special Education (3)
This course provides the special educator with relevant back-ground on the legal issues impacting students with disabilities. Advocacy issues and collaborative roles of administrators, parents, teachers, and significant others in implementing federal legislation will be addressed. The text will be supplemented by more recent case law and policy developments in special education. *Prerequisite: SPE 3340 or SPE 6640 (or equivalent)*

SPE 6632 Assessment and Individual Programming (3)
A comprehensive study of the assessment process used in the field of Special Education will be examined to include both standardized assessment measures and curriculum based measures. Emphasis will be on the selection, administration, and analysis of standardized assessment instruments along with the development, administration, and analysis of curriculum based instruments in determining eligibility for placement and instructional planning. *Prerequisite: Undergraduate special education assessment course*

SPE 6635 Meeting Instructional Needs Through Technology (3)
This is an advanced survey course in the

classroom-adaptable and assistive technologies that are associated with the personal computer and other technologies that assist the learner with disabilities in accessing the teaching and learning environments. This course includes information on the assessment of assistive technology needs as a means of considering assistive technology and matching adaptations with individual-needs in various settings. The student will explore ways to make instruction more meaningful for learning. Study will also focus on familiarity with keyboarding, disk operating systems, and tool software. Proficiency with word processing, database and spreadsheet use in an integrated program is developed. *Prerequisite: an undergraduate course in the integration of technology into the curriculum*

SPE 6640 Teaching Diverse Learners (3)
The purpose of this course is oriented toward identifying exceptional students and providing appropriate learning experiences in the classroom setting. This course is a survey of the nature and needs of exceptional children and an introduction to their educational programs.

SPE 6694 Collaborative Teacher K-6 Practicum (3)
The practicum is designed to provide a supervised experience related to instruction in the area(s) of specialization (K-6). The application of skills, concepts, and principles acquired in previous coursework as well as current research will be emphasized.

SPE 6697 Field Based Research Project (3)
The purpose of this course is to provide graduate students with an opportunity to design, implement, and write about quantitative or qualitative research related to their own teaching. This course will be taken at the end of the graduate program of study. *Prerequisite: SPE 6610*

SPE 6699 Collaborative Teacher K-6 Initial Practicum (3)
The practicum is for those candidates that do not currently hold an undergraduate teaching certificate for Collaborative Teacher, K-6. This is a supervised experience in the inclusive K-6 classroom and for students with disabilities in a resource and/or self-contained setting. The prospective Collaborative Teacher will spend 100 clock hours in designing instructional programs that emphasize the adaptation and/or modification of the curriculum content and teaching methods that will allow the student with a

disability to access the general education curriculum as outlined by the Alabama Course of Study. The prospective Collaborative Teacher will work collaboratively with the general education teacher, special education teacher, IEP committee, and other professionals to design and deliver an appropriate education for students with disabilities. *Prerequisite: completion of all course work in the core and teaching field areas for persons who do not currently hold an undergraduate teaching certificate in Collaborative Teacher, K-6*

SPEECH

- SPH 5531 Interpersonal Communication (3)**
A study of theories of communication behavior in relatively unstructured face-to-face situations, including small-group discussion.
- SPH 5541 Oral Interpretation (3)**
A study and application of the principles and practices of oral interpretation (reading) of literature, including individual and ensemble performance.
- SPH 5542 Rhetoric (3)**
A study of the historical development of rhetorical theory in Western thought from the Classical to the Contemporary periods and its relationship to practice and criticism. The course includes opportunities for advanced public speaking and small group discussion.
- SPH 6625, 6626, 6627 Specialized Study in Area of Speech Communication (1-3)**
(Total specialized study hours may not exceed nine semester hours)
Under the supervision of the faculty course supervisor, the student may pursue an extensive study of a particular area which fits his/her academic needs but is not available in the regular curriculum. Each proposal must be approved the preceding term by adviser, course supervisor, and department chair. Total credit for any combination of enrollments in these courses may not exceed six hours. See semester hour limits listed under Course Restrictions in General Regulations section.