COURSE DESCRIPTIONS

ACCOUNTING

ACT 6625 Specialized Study in the Area of Accounting (1-3)
6626 Study of problem or problems using research tech-
6627 niques. Selection of the problem must be approved by the student's adviser, instructor under whom the study is to be made, and the appropriate dean . The study must 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 the General Regulations section. *Prerequisites: All business and accounting foundation courses or equivalent.*

ACT 6632 Corporate Financial Reporting (3)
A study of corporate financial accounting topics, including income and expense recognition, recording of assets and liabilities, and financial statement presentation.

ACT 6650 Forensic Accounting and Fraud Examination (3)
Auditing theory and procedures as applied to fraud prevention, detection, and investigation. *Prerequisites: Admission to Master of Accountancy (MAcc) degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6651 Accounting Systems and Controls (3)
An advanced study of accounting information systems concepts, applications, and control issues. 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. *Prerequisites: Admission to Master of Accountancy degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6652 Financial Accounting Research (3)
An individual study of specific accounting topics utilizing the accounting authoritative literature and written and oral communication of the results of the research. *A grade of "B" or better is required. Prerequisites: Admission to Master of Accountancy degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6653 Advanced Financial Reporting & Analysis (3)
A study of advanced financial accounting topics from a practical perspective with emphasis on rele vant pronouncements by professional organizations and governmental agencies. *Prerequisites: Admission to Master of Accountancy degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6654 Advanced Auditing and Assurance Services (3)
A study of advanced auditing theory, standards, practices and problems encountered in the practice of public accounting. *Prerequisites: Admission to Master of Accountancy degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6655 Advanced Management Accounting (3)
A study of accounting as related to making decisions. Course will include readings, cases, and problems dealing with managerial accounting issues, accounting concepts, budgeting and cost control using accounting information in planning and control. *Prerequisites: Admission to Master of Accountancy degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6656 Professional Certification (3)
A certification review course. This course requires co-enrollment in an independent professional certification review course designated by the School of Accountancy. Verification of enrollment is required. *Prerequisites: Admission to Master of Accountancy degree program and completion of all MAcc foundation and accounting prerequisites.*

ACT 6691 Financial and Managerial Accounting for the Global Manager (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. *Prerequisite: Graduate standing, acceptance into the MBA program and all undergraduate business prerequisite courses or equivalents completed.*

ACT 6692 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. *Prerequisites: All business foundation courses or equivalent and ACT 3391, ACT 3392, ACT 3394, ACT 3396, ACT 4494, ACT 4495 and ACT 4497.*

ACT 6695 Accounting Research & Communication (3)
An individual study of specific accounting topics and written and oral communication of the results of the study. *A grade of "B" or better is required. Prerequisites: All business foundation courses or equivalent and ACT 3391, ACT 3392, ACT 3394, ACT 3396, ACT 4494, ACT 4495 and ACT 4497.*

ACT 6696 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. *Prerequisites: All business foundation courses or equivalent and ACT 3391, ACT 3392, ACT 3394, ACT 3396, ACT 4494, ACT 4495 and ACT 4497.*

ACT 6698 Advanced Auditing (3)
A study of advanced auditing theory, practice and problems encountered in the practice of public accounting. *Prerequisites: All business foundation courses or equivalent and ACT 3391, ACT 3392, ACT 3394, ACT 3396, ACT 4494, ACT 4495 and ACT 4497.*

ACT 6699 Contemporary Issues in Accounting (3)
A study of contemporary accounting issues and an analysis of how accounting practice is influenced by regulatory agencies, economic conditions, and professional accounting organizations. *Prerequisites: All business foundation courses or equivalent and ACT 3391, ACT 3392, ACT 3394, ACT 3396, ACT 4494, ACT 4495 and ACT 4497.*

ADULT EDUCATION

ADE 5560 Instructional Systems Development (3)
This course emphasizes systematically developed course design. Special attention is given to learning and instructional systems theory.

ADE 6600 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.

ADE 6605 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.

ADE 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.

ADE 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.

ADE 6610 Foundations of Workforce Development (3)
This introductory course provides an exploration of the scope, values, and purposes of the field of Workforce Development.

ADE 6612 Workforce Management and Organizational Development (3)
This course provides an introduction to the field of Workforce Management and Organizational Development (WMOD). It examines basic concepts and principles of human performance, the theoretical underpinnings of the field, research and application literature, and various approaches to solving human performance problems. A systematic approach to the analysis, design, development, implementation, and evaluation of performance improvement interventions within organizations is emphasized.

ADE 6617 Seminar in Personnel Planning and Leadership (3)
This course focuses specifically on an understanding of how leadership is distributed among leaders (formal and informal) and followers within an organization. Special emphasis will be given to building leadership capacity with an organization.

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 6640 Social Context of Adult Education (3)
This course examines the social context of adult education in terms of the impact of social, political, economic, global, and technological changes. Special emphasis will be given to the analysis of trends and issues, synthesis of complex concepts, and development of reflective practice.

ADE 6641 Organizational Behavior and Group Dynamics (3)
An overview of paradigms, theories, models, and constructs of organizational cultures designed to provide students with an understanding of group dynamics within organizations.

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 Adult Learning and Development (3)
This course is a study of the distinctive characteristics of adult development and the implications for adult learning. Emphasis will be given to the understanding of philosophical orientations related to the nature of adult learners and their learning processes; principles of motivation and effective facilitation geared toward adult learners; and social and cultural influences on adult learning.

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 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.

ADE 6695 Thesis (1-6)
The thesis must be related to both the student's concentration area and adult education. Information regarding thesis guidelines and requirements may be obtained from the Graduate School office. *Grading system is Pass/Fail.*

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

ADE 6699 Capstone (3)
This course is a culminating experience that helps students integrate and apply the knowledge they have gained in their program. Emphasis is placed on challenging students to view the adult educational process from many perspectives. Working independently students will create an educational portfolio to demonstrate mastery of program objectives and proof of readiness to receive a master's degree, which will be submitted in portions throughout the term/semester for feedback from the instructor and classmates. An oral presentation will be required. Grading system is Pass/Fail. *Prerequisites: Completion of all core (ADE 6600, ADE 6640, ADE 6670, ADE 6691) and at least four of the six required concentration classes. Students must obtain a 3.0 GPA before entering ADE 6699.*

ANTHROPOLOGY

ANT 5510 High Civilizations of the Old World (3)
An anthropological examination of the sociocultural systems that formed the foundations of the pre-industrial high civilizations of the Old World and a survey of past cultures that achieved this degree of development. Emphasis on the theoretical basis for the anthropological interpretation of past societies.

ANT 5511 High Civilizations of the New World (3)
An anthropological examination of the sociocultural systems that formed the foundations of preindustrial civilizations of the New World and a survey of past cultures that achieved this degree of development. Emphasis on the theoretical basis for the anthropological interpretation of past societies.

ANT 5540 Culture in the Media (3)
This course explores anthropological concepts by focusing on the connections between the media of mass communication and multiple forms of popular art and culture.

ANT 5550 Anthropology of Sex and Gender (3)
This course will focus on gender as a primary organizing principle of society and explore how these categories get created, reproduced and transformed. Topics of discussion include: the social position of men and women in the family; changing social, economic and political ideologies with respect to the construction of gender and the reproduction of gender inequality from a global perspective.

ANT 5560 Magic, Witchcraft and Religion (3)
An examination of the role of religion and the supernatural among traditional peoples with an emphasis on the theoretical aspects of the anthropological approach to religion.

ANT 5570 Anthropology of Power and Citizenship (3)
This course explores anthropological concepts of state power, governmental centralization and the simultaneous devolution of governmental responsibilities to ordinary citizens. It uses ethnographic materials to demonstrate the negative consequences of budget-cutting and unfettered free market ideologies employed by nation-states and provides ethnographic examples of resistance to current global trends promoting Western economic hegemony.

ANT 6625 Specialized Study in Anthropology (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 General Regulations section.

ANT 6665 Advanced Readings in Anthropology (3)
This course is designed to allow graduate students the opportunity to acquire a basic background in Anthropology literature. The readings will be in specific areas in Anthropology. May be repeated (with different topic) for credit. See semester hour limits listed under Course Restrictions in General Regulations section.

ANT 6696 Selected Topics in Anthropology (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 General Regulations section.

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 Specialized Study in Area of Art (1-3)
6626 An individualized study with studio art faculty.
6627 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 5505 Entomology (3)
A study of the orders of insects with the emphasis on morphology, taxonomy, and life cycles. *Prerequisites: General Biology. Co-requisite: BIO L505*

BIO L505 Entomology Lab (1)
A study of morphology, classification, and identification of insects. A collection is required. *Co-requisite: BIO 5505*

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. Co-requisite: BIO L513*

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

BIO 5514 Food Microbiology (3)
This course focuses on topics in microbial metabolism, food spoilage, food preservation techniques, and foodborne pathogens and their control. Some molecular techniques will be introduced. *Prerequisites: BIO 3372/L372. Corequisite: BIO L514.*

BIO L514 Food Microbiology Lab (3)
This lab focuses on advanced microbiological laboratory techniques including enumeration and analysis of bacteria in food, water, and dairy products. *Prerequisites: BIO 3372/L372. Corequisite: BIO 5514*.

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. Co-requisite: BIO L516*

BIO L516 Microbial Ecology Lab (1)
Microbial ecology laboratory techniques including isolation, identification, and enumeration of microorganisms from aquatic and terrestrial environments. *Co-requisite: 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, Genetics, General Chemistry, Statistics. Co-requisite: BIO L521*

BIO L521 Population Ecology Lab (1)
Field exercises in identifying ecological problems, formulating and testing hypotheses, and evaluating data using standard statistical methods. *Co-requisite: 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. Co-requisite: BIO L530*

BIO L530 Applied Genetics Lab (1)
An introduction to procedures and equipment used in the study of cytogenetics and molecular genetics. *Co-requisite: BIO 5530*

BIO 5547 Ornithology (3)
A study of the morphology, anatomy, physiology, taxonomy, life histories, distribution, and adaptations of birds. *Prerequisites: General Biology, General Ecology. Co-requisite: BIO L547*

BIO L547 Ornithology Lab (1)
A study of the structural features, identification, and classification of birds. *Co-requisite: BIO 5547*

BIO 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 WWII 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. Prerequisite: Graduate standing at Troy University.

BIO 5551 Toxicology (3)
A study of the principles related to the adverse effects of chemicals on living organisms. Prerequisite: Organic Chemistry. *Co-requisite: BIO L551*

BIO L551 Toxicology Lab (1)
An assessment of terrestrial and aquatic toxicity of chemical agents following standard protocols. *Co-requisite: 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. Co-requisite: BIO L571*

BIO L571 Parasitology Lab (1)
A laboratory study of parasitic protozoa, helminths, and arthropods, with the emphasis on those of medical importance. *Co-requisite: BIO 5571*

BIO 5576 Special Topics (1-4)
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. Co-requisite: BIO L578*

BIO L578 Cell Biology Lab (1)
Experimental approaches for studying cells at the biochemical and molecular levels. *Co-requisite: BIO 5578*

BIO 5579 Environmental Assessment (3)
An examination of theory and practices required in performing stream environmental assessment as currently practiced by state and federal agencies in their attempt to preserve biological integrity. Sustainable management of natural resources and a systems approach to environmental problem solving will be emphasized. Topics covered include water quality, habitat assessment, indicator species used in ecological inventory with a concentration on macro invertebrate and fish assemblages, and the index of biological integrity. *Prerequisites: BIO 1101/L101; 2202/L202 or 2229/L229. Corequisite: BIO L579.*

BIO L579 Environmental Assessment Lab (1)
Laboratory instruction and hands-on field training regarding stream environmental assessment as currently practiced by state agencies in their attempt to preserve biological integrity. Topics covered include measurement of water quality, habitat, and practice sampling techniques, with a concentration on fish and macro invertebrate assemblages. In addition, students will learn the use of the index of biological integrity using their own collections of fish assemblages. . *Prerequisites: BIO 1101/L101; 2202/L202 or 2229/L229. Corequisite: BIO 5579.*

BIO 5580 Histology (3)
A study of the microscopic anatomy and function of cell types and tissues of mammalian organs. *Prerequisite: general biology. Co-requisite: BIO L580*

BIO L580 Histology Lab (1)
A study of the microscopic anatomy of cell types and tissues of mammalian organs. *Co-requisite: 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. Co-requisite: 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. *Co-requisite: BIO 5582*

BIO 5592 Guided Independent Research (1-4)
Additional information is indexed under "Guided Independent Research and Study."

BIO 5594 Guided Independent Study (1-4)
Additional information is indexed under "Guided Independent Research and Study."

BIO 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.

BIO 6603 Environmental Management (3)
Concepts and practices underlying procedures for environmental resource management, including planning, organizing, and conducting programs.

BIO 6610 Principles and Methods for the Teaching Assistant (1-2)
This course will provide each student with significant "hands-on" experiences in college level instruction and develop the knowledge and skills teachers need to implement inquiry-based instruction. Students will work under the direct mentorship and supervision of the course instructor and will be trained in techniques, current presentations, and teaching methods of laboratory-based biology. *(Students seeking one (1) semester hour credit will be required to assist in one laboratory course. Students seeking two (2) semester hours credit will be required to assist in two laboratory courses or laboratory courses with multiple sections.)*

BIO 6611 Global Pollution and International Environ mnetal Policy (3)
An examination of global environmental issues, such as global climate change, ozone depletion, and acid precipitation. This course also deals with alter native in developing global policies and treaties to address these problems.

BIO 6612 Environmental Impact Studies and 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 eco logical constraints, economic evaluation, and quanti tative approaches to predict impact.

BIO 6617 Seminar in Environmental and Biological Sciences (1)
6618 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.

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.

BIO 6625 Specialized Study in Biology (1-4)
6626 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 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*.

BIO L630 Pollution Science Lab (1)
Theory and analytical techniques used in both field and laboratory for the analysis of air, water, and soil contaminants. *Prerequisite: general chemistry*

BIO 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: BIO 6630, BIO L630, or permission of chair. Co-requisite: BIO L650*

BIO L650 Spatial Analysis Using Geographical Information Systems Lab (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. *Co-requisite: BIO 6650.*

BIO 6655 Clinical Biochemistry (3)
This course is the discipline of pathology (or laboratory medicine) that is concerned with the detection and measurement of biochemical changes in disease. This course will give a succinct overview, the "big picture", and relevance of biochemistry and essential pathways that regulate and affect various disorders. Discussion of potential targets for research and drug development through the use of case studies will be included. *Prerequisites: Cell Biology/Lab, General Chemistry/Lab, Genetics or equivalent, or by permission of instructor.*

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 6665 Sustainable Development (3)
This course will increase student awareness of sustainability issues concerning the future survival of humans 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.

BIO 6670 Special Topics (1-4)
6671 Specialized topics not generally included in course offerings. A maximum total of 4 semester hours is allowed for program credit.

BIO 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 semester hours in probability and statistics or permission of instructor. A grade of "B" or better is required.*

BIO 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 or biological science. The completion of a thesis is required. The results and conclusions must be successfully defended before the student's graduate committee. *Grading system is Pass / Fail. Prerequisites: 3.0 GPA and permission of the Chair of the Biological and Environmental Sciences department.*

BIOMEDICAL SCIENCE

BMS 6615 Medical Microbiology and Immunology (3)
Emphasizes the basic clinical applications of microbiology and immunology in the treatment and prevention of infectious diseases. *Co-requisite: BMS L615*

BMS 6620 Neuroscience (3)
Introduces the structure and functions of the nervous system. Special attention will be placed on the functional systems of the brain and the senses.

BMS 6625 Medical Cell Biology (3)
Focuses on the cellular and molecular bases of human diseases and disease processes.

BMS 6630 Medical Pharmacology (3)
This course reviews the beneficial and harmful actions of drugs on the tissues and organs of the body. Provides the foundation for understanding drug actions in health and disease.

BMS 6635 Medical Physiology (3)
Reviews the functions of the various organ systems and their integration in the human body at an advanced level.

BMS 6655 Clinical Biochemistry (3)
This course is the discipline of pathology (or laboratory medicine) that is concerned with the detection and measurement of biochemical changes in disease. This course will give a succinct overview, the "big picture", and relevance of biochemistry and essential pathways that regulate and affect various disorders. Discussion of potential targets for research and drug development through the use of case studies will be included. *Prerequisites: Cell Biology/Lab, General Chemistry/Lab, Genetics or equivalent, or by permission of instructor.*

BMS 6665 Neuroanatomy (3)
This graduate course is a comprehensive study of the anatomy of the human nervous system. Special emphasis will be placed on relating clinical disorders to the relevant neurological structures and pathways. *Prerequisites: Anatomy and Physiology, Biochemistry, Microbiology.*

BMS 6660 Histology and Embryology (3)
Microscopic organization, structure, and function of human tissues and organs; the principles of human embryonic and fetal development.

BMS L660 Histology and Embryology Lab (1)
Microscope anatomy and function of cell types and tissues of mammalian organs during development and adulthood.

Prerequisites: anatomy and Physiology or permission of instructor. Corequisite: Histology and Embryology.

BUSINESS

BUS 5501 Survey of Business Concepts I (3)
Survey of Business Concepts I provides a survey of key concepts in Management, Marketing, Management Information Systems, and Law that provides a foundation for further study in the MSM or MSHRM courses. Course will not transfer to any other programs. *Students must earn a grade of "B" or better in the course.*

BUS 5502 Survey of Business Concepts II (3)
Survey of Business Concepts II provides a study of key concepts in Accounting, Finance, Quantitative Management, and Economics that provides a foundation for further study in the MSM or MSHRM courses. Course will not transfer to any other programs. *Students must earn a grade of "B" or better in the course.*

BUS 6601 International Business Law (3)
A review of international business legal systems and international law as it applies to Multinational businesses operating in a Global environment to include: international sales, credits, and commercial transactions, international treaties, U.S. trade law and regulation of the international market place.

BUS 6607 Capstone Experience (1)
This course is a complement to the capstone course in the MBA program. It provides an opportunity to apply the concepts learned in earlier courses and in the capstone course by using an international business simulation. The course includes two program assessments. *A grade of "B" or better is required to complete this course successfully. The course may not be transferred into the MBA program from another institution. Co-requisite: BUS 6611.*

BUS 6605 Business & 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. *Prerequisite: All business foundation courses or equivalent.*

BUS 6600 Survey of Business Concepts (3)
An overview course of the business management field including the functional areas of economics, marketing, quantitative methods, human relations, and human resource management. *A grade of "B" or better is required. Graduate standing, acceptance into the MBA program, all undergraduate business prerequisite courses or equivalent completed.*

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 business student proper research techniques and includes a research proposal. *A grade of "B" or better is required. Prerequisite: All business foundation courses or equivalent.*

BUS 6611 Global Business Strategy (3)
This course is the capstone course in the MBA 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 two program assessments. *Prerequisites: Completion of a minimum of 24 sh in the MBA program with a B average or better including the following courses: ACT 6691, ECO 6655, FIN 6631, MKT 6661, MGT 6615, and QM 6640 or approval of the Department Chair. Students should be in their last term or semester of their program when completing this course. Co-requisite: BUS 6607. A grade of "B" or better is required.* The course may not be transferred into the MBA program from another institution.

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. Prerequisite: All business foundation courses or equivalent.*

BUS 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. *Prerequisite: All business foundation courses or equivalent.*

BUS 6625 6626 6627 Specialized Study in the Area of Business Administration (1-3)
Study of problem or problems using research techniques. Selection of the problems must be approved by the student's adviser, the instructor under whom the study is to be made, and the appropriate dean. The study should contribute to the student's program. Preparation of a scholarly paper is required and many involve and 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 on once in student's program. *Prerequisite: All business foundation courses or equivalent.*

BUS 6686 Internship I (1)
Supervised professional business experience in a field setting. Required course for the MSHRM Internship Program. Permission of Internship Director and Authorization of the Designated School Official required. Must be accepted into the MSHRM Internship Program and enrolled in MSHRM program courses.

BUS 6687 Internship II (1)
Supervised professional business experience in a field setting. Required course for the MSHRM Internship Program. Permission of Internship Director and Authorization of the Designated School Official required. Must be accepted into the MSHRM Intern-

ship Program and enrolled in MSHRM program courses.

BUS 6688 Internship III (1)
Supervised professional business experience in a field setting. Required course for the MSHRM Internship Program. Permission of Internship Director and Authorization of the Designated School Official required. Must be accepted into the MSHRM Internship Program and enrolled in MSHRM program courses.

BUS 6689 Internship IV (1)
Supervised professional business experience in a field setting. Required course for the MSHRM Internship Program. Permission of Internship Director and Authorization of the Designated School Official required. Must be accepted into the MSHRM Internship Program and enrolled in MSHRM program courses.

BUS 6691 Internship V (1)
Supervised professional business experience in a field setting. Required course for the MSHRM Internship Program. Permission of Internship Director and Authorization of the Designated School Official required. Must be accepted into the MSHRM Internship Program and enrolled in MSHRM program courses.

BUS 6694 Global Immersion (1-3)
This course will be developed as required by designated faculty. For example, a trip to visit a number of businesses engaged in export activity can be arranged, or an overseas trip conducted by a tour agency to visit overseas firms during a break period with a faculty member is feasible.

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 inorganic molecules, detailed molecular orbital applications, descriptive chemistry of the transition elements, including organometalic 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. *Co-requisite 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. Co-requisite: 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. *Co-requisite: 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. Co-requisite: 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. *Co-requisite: 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. *Co-requisite 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 substi-*

tuted 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

CJ 6610 Principles of Administration (3)
A survey of the basic principles and functions of personnel administration with special attention paid to criminal justice applications.

CJ 6620 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.

CJ 6621 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.

CJ 6622 Seminar in 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.

CJ 6624 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.

CJ 6625 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.*

CJ 6630 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.

CJ 6635 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."

CJ 6636 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.

CJ 6638 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.

CJ 6640 Seminar in Law Enforcement (3)
An in-depth examination of the various issues and problems currently being experienced in American policing.

CJ 6644 Administrative Law (3)
A study of the legal environment in which the public administrator functions. The process 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 6645 Ethics in Criminal Justice Organizations (3)
The study of philosophical and practical issues related to ethical decision making in criminal justice organizations. Emphasis is given to the analysis of ethical dilemmas confronting the contemporary criminal justice system and the development of analytical skills and a values framework to act as ethical criminal justice professionals.

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. Students must have completed 12 hours in the program before enrolling in this course.*

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 6690 Capstone for Criminal Justice (3)
This course is the culmination of the MSCJ program and serves to assess the student's ability to critically analyze and integrate learning acquired in coursework across the program. Emphasis is on critical examination of current trends and research in criminal justice as well as design and implementation of criminal justice research. Comprehensive examinations will be administered in each of the MSCJ program core curriculum areas. Students must earn a grade of "B" or better in the course. Students should enroll in the capstone course during their last semester of enrollment. *Prerequisites: Students must have successfully completed at least 24 semester hours of coursework which must include all core courses (CJ 6610, CJ 6620, CJ 6636, and CJ 6650). Students must have a GPA of at least 3.0 and a grade of "B" or better in CJ 6650 before enrolling in the capstone course.*

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 "IP" until the completion of the thesis. Enrollment is available ONLY to students in residence at the Troy, Alabama campus.*

CJ 6695 Thesis (3)
The completion and oral defense of the thesis. *Grading system is Pass / Fail. Enrollment is available ONLY to students in residence at the Troy, Alabama campus.*

COMMUNICATION STUDIES

COM 5531 Interpersonal Communication (3)
A study of theories of Communication behavior in relatively unstructured face-to-face situations, including small-group discussion.

COM 5541 Oral Interpretation (3)
A study and application of the principles and practices of oral interpretation (reading) of literature, including individual and ensemble performance.

COM 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.

COM 6600 Communication and Influence (3)
This class is designed to increase the students' understanding of and ability to use social media in an advocacy role. Students will study argument, interaction and political communication in personal, print, and online environments. Emphasis is placed on persuasion theories and the role of messages as agents for change.

COM 6605 Strategic Communication Theories (3)
Students will explore communication theories from classical to current times along with their practical applications. Special attention is placed on crisis communication and the role of new technologies.

COM 6610 Leadership and Media Strategies (3)
Using leadership skills to approach communication effectively with a variety of media tools. Topics include media relations, media characteristics, media decisions, the impact of emerging communication technologies on the communication process, mentoring communication skills, presentation skills and media budgets.

COM 6620 Contemporary Issues in Strategic Communication (3)
The study of contemporary issues related to strategic communication and appropriate delivery mechanisms. Students will develop communication plans for critical audiences facing problematic situations.

COM 6625 Specialized Study in Area of Speech
6626 Communication (1-3)
6627 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. Total specialized study hours may not exceed six semester hours.

COM 6630 Strategic Communication and Emerging Media (3)
Students will examine the strategic use of emerging media in communication campaigns. Topics include Internet usage, audience analysis, media relations, public relations media plans, social media advertising, blogs, electronic publishing and web design.

COM 6635 Strategic Organizational Communication (3)
This course allows students to discuss the impact of mediated communications within organizations and how to use digital and conventional communication technologies to reach diverse publics.

COM 6691 Strategic Communication Inquiry and Research (3)
The examination and evaluation of research methods used with strategic communication data. Students will apply this knowledge in a study of communication problems. Students may not enroll in COM 6699 without successfully completing this course. *A grade of "B" or better is required.*

COM 6699 Strategic Communication Capstone (3)
This course provides a culminating experience in which students will integrate the theoretical and practical strategic communication skills developed in prior courses. Students will apply these skills by developing an effective communication campaign. *A grade of "B" or better is required. This course is open only to students who have completed 18 hours of coursework (including COM 6691) in the program.*

COUNSELING

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.

CP 6616 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 6617 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 6618 Counseling Military Service Personnel and their Families (3)
Examines essential knowledge and current research on counseling issues that impact military personnel and their families. Analyzes the concerns that affect military families through pre-, during, and post-deployment, as well as significant issues for children and adults in school and agency settings. Also addresses issues relating to student veterans pursuing post-secondary education.

CP 6619 Assessment, Diagnosis, Treatment Planning, and Community Reintegration for Military Service Populations (3)
Utilizes essential knowledge and current research on counseling issues that impact military personnel and their families. Obtains, analyzes and applies assessments, evaluative data, and diagnostic information to the development of comprehensive treatment planning for behavioral symptoms, short-term objectives, long term goals and therapeutic interventions for military personnel and their family members in personal, educational, and community environments. Psychopharmacology treatment interventions are covered.

CP 6620 Readings in Counseling and Psychology (1-3)
6621
6622
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 Specialized Study in Counseling (1-3)
6626
A study of a problem or a topic using research

6627 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. *Prerequisite: CP 6650. Grading system is Pass/Fail.*

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. *Prerequisite: CP 6638. Grading system is Pass/Fail.*

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*

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 6645 Current Trends in School Counseling (3)
The course is designed to provide the students with relevant information and current trends in the school counseling profession.

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.

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. Students enrolled in practicum must complete requirements in program major area. Students changing majors will be required to retake practicum in another program area. *Grading system is Pass / Fail. Prerequisites: Permission of instructor and department chair required. CP 6600, CP 6610, CP 6642, and CP 6649 are required for all programs. In addition, PSY 6669 and PSY 6670 are required for Clinical Mental Health; CP 6652 is required for Rehabilitation Counseling; CP 6641 is required for School Counseling.*

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 6655 Practicum: General Counseling (3)
This study provides an opportunity for the student to perform, under supervision, a variety of activities that a regularly employed 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. *Grading system is Pass / Fail. Prerequisites: Permission of instructor and department chair required. CP 6600, CP 6610, CP 6642, CP 6649.* This practicum does NOT meet criteria for licensure.

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, family, and sex 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 clock hours of internship, to include 120 hours of direct student service. *Grading system is Pass/Fail. 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. *Grading system is Pass/Fail. 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 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. *Grading system is Pass/Fail. 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 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. Grading system is Pass/Fail. *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. *Grading system is Pass/Fail. 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. 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. *Grading system is Pass/Fail. 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. 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. *Grading system is Pass/Fail. Prerequisite: Completion of CP 6650 and adviser approval.*

CP 6665 Internship: Addictions Counseling (3)
This course provides an opportunity for the student to perform a variety of activities that a regularly employed professional counselor in an Addictions Counseling Treatment 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. *Grading system is Pass/Fail.*

CP 6666 Internship: Addictions Counseling (3)
This course provides an opportunity for the student to perform a variety of activities that a regularly employed professional counselor in an Addictions

Counseling Treatment 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. *Grading system is Pass/Fail.*

CP 6670 Internship: Rehabilitation Counseling (3)
This course provides supervised experiences 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. *Grading system is Pass/Fail. 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. 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. *Grading system is Pass / Fail. Prerequisite: CP 6650*

CP 6680 Counseling Approaches to Working with Individuals who are Deaf/Hard-of-Hearing (3)
This course offers students an opportunity to learn the principles of deaf culture and apply medical, psychological, and sociological research/techniques to counseling with individuals who are deaf or hard-of-hearing. *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: Deaf and Hard-of-Hearing Services (3)
The purpose of this course is to develop an appreciation for the organization, administration, and coordination of services for individuals who are deaf or hard-of-hearing. Strategies for consulting with various agencies, educating the general public, counseling with individuals who are deaf or hard-of-hearing. and their families as well as approaches for advocating for these populations will be explored. *Prerequisites: CP 6652 or permission of instructor.*

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, PSY 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.

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 Job Development, Placement, and Workplace Accommodations for Individuals with Severe Disabilities (3)
This course is a study of effective job development and placement techniques and workplace strategies in the rehabilitation process for individuals who are Blind, Deaf, Hard-of-Hearing, Mentally Ill, and individuals who have Traumatic Brain Injuries, Spinal Cord Injuries, Learning Disabilities, and Multiple Disabilities.

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. *Students enrolled in the Counseling and Psychology programs are required to take CP 6691 Research Methodology only at Troy University. This research course may not be substituted with another Troy University research course or one transferred from another university. 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. *Prerequisites: CP 6642 and CP 6650 or equivalents and permission of the instructor. Enrollment restricted to Ed.S. students.*.

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. *Prerequisite: CP 6649 or equivalent*

CP 7725 Advanced Studies in Counseling (1-3)
7726 A study of a problem or topic using research
7727 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.*

CP 7753 Internship: Advanced Counseling (1-3)
7754 This course provides advanced graduate students
7755 with full-time, supervised, on-the-job experience in settings appropriate to their area of specialization. Experiences accompanied by weekly on-campus meetings designed to provide opportunity for analysis and evaluation of supervised activity. *Grading system is Pass/Fail.*

CP 7791 Research Seminar (1-3)
7792 This course provides in-depth assistance to pre-
7793 pare students for development of, research for, and preparation of theses 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. *Grading system is Pass/Fail. Enrollment limited to Ed.S. students*.

CP 7795 Thesis (3-6)
7796 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. *Grading system is Pass/Fail. Enrollment limited to Ed.S. students*.

COMPUTER SCIENCE

CS 5545 Computer Architecture (3)
Functional descriptions of the major components of digital computer architectures are explored, 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 3310, CS 3365 or CS 4445*

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 Specialized Study in Computer Science (1-3)
6626 This course involves the study of a problem or pro-
6627 blems 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.*

CS 6630 Introduction to Bioinformatics (3)
This course covers the computational methods for analyzing information about the sequence, structure, and function of biological molecules and systems, including DNA, RNA, proteins, metabolites, and other small molecules. Topics include: multiple sequence alignment, Hidden Markov Models, mathematical analysis of phylogenetic trees, physical mapping and assembly of sequences, genome rearrangement.

CS 6632 Computer Vision (3)
Computer Vision is a topic that combines techniques from several different subfields of applied mathematics and computer science. Broadly, computer vision algorithms are used to process, analyze, and understand static and motion picture data. Frequency/time-domain transformations and Machine Learning algorithms serve as the backbone of Computer Vision.

CS 6634 Cloud Computing (3)
This course will cover a wide range of cloud computing related concepts. Topics include but are not limited to cloud computing principles, economics, protocols, infrastructures, components, service architectures and implementations. In addition, Hadoop/ map reduce as a programming model will be discussed.

CS 6640 Advanced Database 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 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 hardwire compilers, extensibility of languages, and implementation of simple compilers. *Prerequisite: CS 3372 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 Optimization Modeling (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 Computer Science (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 6660 Algorithmic Graph Theory (3)
Theory and algorithms for solving computational problems in graphs and hypergraphs. The topics may include minimum transversals, maximum matchings, trees and bipartite graphs, chordal graphs, planar graphs and graph coloring, hypertrees, chordal hypergraphs, planar hypergraphs and hypergraph coloring, colorability, perfection, and chromatic spectrum. *Prerequisites*: *CS 3323 and MTH 4420, or permission of the instructor.*

CS 6664 High-Performance Computing (3)
This course teaches the methods and technology of high-performance computing and its usage in solving scientific problems. Topics focus on advanced computer architectures, parallel algorithms, parallel languages, performance-oriented computing, and grid and cluster computing. *Prerequisite* : *CS 3323*

CS 6666 Computer Graphics (3)
This course covers the theory, design, implementation and applications of computer graphics. Topics include common graphics hardware, 2D and 3D transformations and viewing, basic raster graphics, concepts image processing, modeling, rendering, illumination, shadows, textures, programmable shaders, and animation. *Prerequisite* : *CS 3323*

CS 6668 Network Security (3)
The course covers theory and practice of communication security in computer systems and networks. Topics include authentication and access control, virtual networks, shared key encryption, public key encryption, and digital signature. *Prerequisite* : *CS 4445*

CS 6670 Applied System 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. *Prerequisite*: CS 4447 recommended

CS 6672 Distributed Algorithms (3)
This course will study issues in distributed computing through models, algorithms and bounds, with an emphasis on fundamental problems. Topics in this course will include but not limited to basic models and complexity measures, leader election, mutual exclusion, consensus, fault-tolerance, broadcast and multicast, causality, synchronization, simulations among models. *Prerequisite: CS 3329*

CS 6674 Network and Information Security (3)
The goal for students in this course is to learn the fundamentals of network and information security. The topics include introduction to network security, basic cryptography, authentication, cipher techniques, attacks and defenses on computer systems, overview of essential concepts and methods for providing and evaluating security in information processing systems, importance of management and administration, social issues such as individual privacy and public policy.

CS 6676 Advanced Computer Network (3)
The goal of this course is to discuss contemporary issues of computer networks such as Wireless networks, Sensor networks, Optical Networks etc. Students are expected to review research papers and work on semester long projects. Topics will cover issues related to network communication protocol stacks and simulation of these computer networks. This course assumes good knowledge of object-oriented programming.

CS 6678 Advanced 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 6680 Advanced Software Engineering (3)
This course covers advanced theoretical concepts of software engineering. Topics include software development models, requirement analysis, project planning and management, software architecture and design, implementation, and testing and validation.

CS 6682 Machine Learning (3)
Introduction to Machine Learning, covering key algorithms in supervised, unsupervised, and reinforcement learning, such as Kernel Methods, Bayesian Networks, Hidden Markov Models, K-Means, etc. The class will also address key concepts and challenges in Machine Learning, such as the bias-variance tradeoff, generalization, regularization, boosting, etc. The course is project-based, with a focus on application in computational biology/ bioinformatics. A basic knowledge of statistics and probability is a must.

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.

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 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 chair person. *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 & LEADERSHIP

EAL 6609 Communication and Problem Solving (3)
This course is designed to develop communication and problem solving skills required for effective leadership of people, processes, and organizations. Emphasis will be placed on verbal, interpersonal, and written communication, group dynamics, conflict resolution and consensus building. Special attention will be given to working diverse populations.

EAL 6625 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 response will also be used.

EAL 6633 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 are successful leaders are utilized. The ethical and moral aspects of leadership are examined.

EAL 6643 Administration of School Personnel (3)
This course develops capacities to effectively recruit, coordinate, and develop human resources within an educational environment. Administrative procedures such as facilities management, materials management, and technology management will also be discussed.

EAL 6653 Evaluation and Organizational Improvement (3)
This course focuses on basic models and approaches used in evaluating programs and processes for effectiveness. Students will define and discuss evaluation concepts and explore conceptual issues and practical guidelines for conducting a program evaluation.

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. *Co-requisite: EBS L513*

EBS L513 Limnology Lab (1)

Field and laboratory exercises in lake and stream science, including instrumentation, measurement, sampling, and analysis. Co-requisite: 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. Co-requisite: EBS L516*

EBS L516 Microbial Ecology (1)
Microbial ecology laboratory techniques including isolation, identification, and enumeration of microorganisms from aquatic and terrestrial environments. *Co-requisite: 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. Co-requisite: 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. *Co-requisite: 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. Co-requisite: EBS L530*

EBS L530 Applied Genetics Lab (1)
An introduction to procedures and equipment used in the study of cytogenetics and molecular genetics. *Co-requisite: 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. Co-requisite: EBS L551*

EBS L551 Toxicology Lab (1)
Assessment of terrestrial and aquatic toxicity of chemical agents following standard protocols. *Co-requisite: EBS 5551*

EBS 5576 Special Topics (1 - 4)
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. Co-requisite: EBS L578*

EBS L578 Cell Biology Lab (1)
Experimental approaches for studying cells at the biochemical and molecular levels. *Co-requisite: EBS 5578*

EBS 5579 Environmental Assessment (3)
An examination of theory and practices required in performing stream environmental assessment as currently practiced by state and federal agencies in their attempt to preserve biological integrity. Sustainable management of natural resources and a systems approach to environmental problem solving will be emphasized. Topics covered include water quality, habitat assessment, indicator species used in ecological inventory with a concentration on macro invertebrate and fish assemblages, and the index of biological integrity. *Prerequisites: BIO 1101/L101; 2202/L202 or 2229/L229. Corequisite: EBS L579.*

EBS L579 Environmental Assessment Lab (1)
Laboratory instruction and hands-on field training regarding stream environmental assessment as currently practiced by state agencies in their attempt to preserve biological integrity. Topics covered include measurement of water quality, habitat, and practice sampling techniques, with a concentration on fish and macro invertebrate assemblages. In addition, students will learn the use of the index of biological integrity using their own collections of fish assemblages. . *Prerequisites: BIO 1101/L101; 2202/L202 or 2229/L229. Corequisite: EBS 5579.*

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. Co-requisite: 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. *Co-requisite: EBS 5582*

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.

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 Seminars in Environmental and Biological
6618 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 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 Specialized Study in Environmental and
6626 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.*

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. *Prerequisite: general chemistry.*

EBS 6635 Land Use Planning (3)
An introduction to land use planning and land use tools, including zoning and comprehensive planning. The course also examines the interaction between land use and environments and explores strategies to reduce environmental impacts and protect natural resources.

EBS 6637 Environmental Economics (3)
Introduction to the micro and macro aspects of environmental economics. The course will explore the various economic and institutional means of controlling environmental problems for effectiveness, efficiency and equity.

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. Co-requisite: 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. *Co-requisite: 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 6665 Sustainable Development (3)
This course will increase student awareness of sustainability issues concerning the future survival of humans 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 Special Topics (1-4)
6671 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 semester hours in probability and statistics or permission of instructor.* A grade of "B" or better is required.

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 or biological science. The completion of a thesis is required. The results and conclusions must be successfully defended before the student's graduate committee. *Grading system is Pass / Fail. Prerequisites: 3.0 GPA and permission of the Chair of the Biological and Environmental Sciences department.*

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.

EARLY CHILDHOOD

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. Grading system is Pass / Fail.

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 classroom. 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 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 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.

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. *A grade of "B" or better is required.*

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 6630 Advanced Macroeconomics (3)
A survey of modern economic theories of the business cycle. The mathematical methods employed in macro and micro-foundations of macroeconomics will also be covered.

ECO 6631 Advanced Microeconomics (3)
A mathematical analysis of consumer chice, firm production decisions, and maket exchange. Mathematical methods employed in microeconomics will also be covered.

ECO 6632 Econometrics I (3)
An introduction to regression analysis as employed in cross sectional time series econometrics. The statistical and probability tools required for regression analysis will also be covered.

ECO 6633 Econometrics II (3)
A survey of important regression models employed in econometric analysis. Topics will vary according to the interest of instructor, but could include forecasting models, panel data analysis, limited dependent variable, and spatial econometrics.

ECO 6634 Mathematical Economics (3)
An introduction to fundamental mathematical methods used in economic analysis: overviews of differential calculus, linear algebra, constrained optimization, and comparative statics. Also includes an introduction to mathematical statistics as applied to econometrics.

ECO 6652 Macroeconomics and Forecasting (3)
An analysis of the courses of business cycles with the applications of macroeconomic theory and economic forecasting techniques available to the business manager. *Prerequisite: All business foundation courses or equivalent.*

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. *Prerequisite: All business foundation courses or equivalent.*

ECO 6655 Managerial Economics for the Global Manager (3)
A study of the decision-making process of business maagers when operating in a global economy The efficacy of market based approaches to real world problems is considered. Various theories of the firm and managerial strategies are used to study the optimal decision-making rules for business firms when such firms must operate under conditions of uncertainty and in a global environment. *Graduate standing, acceptance into the MBA program, all undergraduate business prerequisite courses or equivalent completed.*

ECO 6657 International Trade and Economics (3)

Principles and problems of international economics, trade theory, international payments, and monetary policies, economic integration, international economic institutions and policies, and contemporary developments in political economy. *Prerequisite: All business foundation courses or equivalent.*

ECO 6660 Public Choice (3)
An analysis of government decision-making using economic models. Topics include voting, the theory of elections, interest groups, rent seeking, bureaucracies, and the organization of legislatures.

ECO 6661 Austrian Economics (3)
An introduction to the market process theory of the Austrian School of economics. Topics include spontaneous order, entrepreneurship, the discovery function of the market, information transmission, and the role of time and uncertainty in economic activity.

ECO 6662 History of Economic Thought (3)
An analysis of the development of economic thinking and the history of the discipline, including the contribution of major economists and trends in economic analysis.

ECO 6663 Economic Institutions and Prosperity (3)
Analysis of the role of institutions in an economic system and an examination of the types of institutions which allow for prosperity, growth, and human flourishing. Theories of institutional change may also be studied.

ECO 6664 International Economic Development (3)
Examination of theories and case studies of how nations develop and rise out of poverty. Topics would include the impact of foreign aid, comparative economic systems, and international trade. Specific countries of focus will vary with instructor.

ECO 6665 Monetary Theory and Policy (3)
Examination of the role of money, credit, and financial institutions in an economy, and the history of the development of money and financial institutions.

ECO 6666 Constitutional Economics (3)
Examination of the role constraints beyond election of government. Normative theories of constitutional constraints and comparative analysis of the performance of constraints will be covered. Theories of constitutional change will be examined.

ECO 6667 Economics of Public Policy (3)
Tools of economic theory used in the analysis of government sector policies. Topics will include normative vs. positive theories of government policy, cost-benefit analysis, theories of market failure, and comparative institutional analysis.

ECO 6668 Advanced Austrian Economics (3)
Further study of the Austrian theory of the market process. Topics include roles of the equilibrium construct in Austrian versus neoclassical price theory, capital theory, and the Austrian theory of business cycle. *Prerequisite: ECO 6661.*

ECO 6690 Master's Research (3)
Directed research on a selected topic of economics, with the advice and approval of a faculty advisor, culminating in a research paper of appropriate length and original scholarship.

ECO 6695 Thesis Hours (1-9)
Directed research on a selected topic of economics, based on a student's proposal, and with the advice and approval of a faculty advisor, culminating in a research paper of appropriate length and original scholarship. Pass/Fail

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*

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.*

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, EDG 6667, and EDG 6668.*

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.*

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 em-

phasized. Prerequisite: *At least six hours in teaching field component and a research course must be completed.*

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 conductive for learning.

EDU 6606 Current and Emerging Instructional Technologies (3)
This introductory course focuses on current and emerging instructional technologies. The emphasis of this class is on the instructional use of computers, Microsoft Office applications, software, desktop publishing, graphics, hypermedia, and the internet. Prerequisite: permission of instructor.

EDU 6607 Curriculum Integration of Technology (3)
This course covers the evaluation, selection, and integration of various instructional software and web -based technologies into curricula, taking into consideration teaching and learning styles while relating technologies to instructional settings, diverse models, and developmental levels. Micro-lessons are produced using multimedia-authoring tools. *Prerequisite: EDU 6606 or permission of instructor.*

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.

EDU 6613 Principles of Instructional Design (3)
This course focuses on the development of instruction by using the Instructional Systems Design (ISD) approach based on the ADDIE Model. Students will develop the necessary pedagogical skills that will facilitate the analysis, design, development, implementation, and evaluation of instructional needs to synthesize appropriate teaching and learning curriculum.

EDU 6614 Advanced Instructional Design (3)
This course further exposes students to the pedagogies, processes, tools, and techniques that facilitate proficiency in developing instructional strategies and materials. This includes case study analysis and in-depth discussion of the literature to foster theoretical application and evaluation of instructional design products. *Prerequisite: EDU 6613*

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 6606 and EDU 6613*

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 6606 and EDU 6613*

EDU 6618 Advanced Multimedia Instruction (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 6617*

EDU 6625 Specialized Study in Area of Education (1-3)
6626
6627
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).

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 6665 Field Project (3)
The content of this course is variable, depending on student interests. The determination of the course content for each student will be made through collaboration between the student, the student's adviser, and the Instructor. Students may focus on supervised teaching, action research, or a project with a P-12 school system. *This course is open only to students enrolled in teacher education programs. The field project does not replace the comprehensive exam. Students are required to take the comprehensive exam.*

EDU 6672 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.

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. *Grading system is Pass/Fail.*

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. Grading system is Pass / Fail. *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. In-

struction deals specifically with measures of central tendency and variability, probability theory, estimation and significance, correlation and regression, analysis of variance, and chi-square. A grade of "B" or better is required.

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. Grading system is 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. *A grade of "B" or better is required.*

EDU 6699 Research in Practice (3)
The purpose of this course is to provide graduate students in teacher education programs with an opportunity to design, implement, and write about practical quantitative or qualitative research related to their own teaching. Joint research projects with P-12 school systems are encouraged. *Prerequisite: EDU 6698 or EDU 6653. A grade of "B" or better is required.*

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 Specialized Study in Education (1-3)
7726 Study of the problem using research techniques.
7727 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 t eacher leaders in their schools. Major emphasis will focus on teacher leader characteristics, skills and effective practices in teacher leadership (recommended as the first course in the ELE/ECE Ed.S. programs).

EDU 7750 Practicum in Area of Specialization (1-3)
7752 The Practicum is a supervised application of the
7757 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, valida-

tion/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 contract 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). *A grade of "B" or better is required. Prerequisite: This course is restricted to Ed.S. candidates only.*

EDU 7795 Thesis (1-6)
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. *Grading system is Pass/Fail.*

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. Grading system is Pass / Fail.*

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 Specialized Study in Elementary Education (1-3)
6626 A study of a problem using research techniques.
6627 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. Grading system is Pass/Fail.

ELE 7725 Specialized Study in Elementary Education (1-3)
7726 A study of a problem using research techniques.
7727 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 educa-

tion or elementary education. *Restricted to students enrolled in an Education Specialist program.*

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 5535 The Bible as Literature (3)
This course studies select works for the Bible for their literary qualities, composition and preservation techniques, and the historical factors that determined inclusion or exclusion as a sacred text.

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 essay, 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 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 classrooms.

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 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 Specialized Study in Area of English (1-4)
6626
6627 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 6656 Studies in Literacy and the English Language (3)
Explores the rationale and practices for integrating the study of grammar and composition in the English language arts classroom.

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 Seminar in Selected Topics (3)
6671 Maximum of two semesters. Study of topic of
6672 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. *A grade of "B" or better is required.*

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 6625 Specialized study in the Area of Finance (1-3)
6626 Study of problem or problems using research
6627 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. The study must 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 the General Regulations section. *Prerequisite: All business foundation courses or equivalent.*

FIN 6631 Global Financial Management (3)
A comprehensive and advanced study of financial analysis, planning and control techniques for a business entity with emphasis on corporations in a global setting. *Prerequisite: Graduate standing, acceptance into the MBA program, all undergraduate business prerequisite courses or equivalent completed.*

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: Graduate standing, acceptance into the MBA program, all undergraduate business prerequisite courses or equivalent completed. FIN 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: FIN 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: FIN 6631.*

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

FIN 6653 Finance Research (3)
A comprehensive graduate study of practical research in Finance. *Prerequisite: FIN 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 co-integration, and models of conditional volatility. *Prerequisite: FIN 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.

FIN 6658 Special Topics in Finance (3)
A study in unique topics in Finance. *Prerequisite: FIN 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 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 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. *NOTE: Not open to education majors.*

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 5550 Introduction to Geographic Information Systems (3)
This course provides an overview of the theory and general principles of geographic information systems (GIS) and hands-on experience in its use. It introduces various methods of geographic data processing and analysis using computer-based mapping software and data gathering techniques, including global positioning systems.

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 6625 Specialized Study in Area of Geography (1-6)
6627 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.*

GEO 6650 Geography of the Global Economy (3)
An examination of the global economy from colonialism to the present. Social, political, and environ-

mental factors associated with the diffusion and intensification of world trade are examined.

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. *Note: May be taken for MSIR credit.*

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. *Note: May be taken for MSIR credit.*

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 American Revolution and New Nation (3)
Ideas and institutions which led to American independence, the creation of an American union, and the development of a distinctive American culture in the period preceding 1800.

HIS 5513 Sectionalism, Civil War and Reconstruction (3)
Examines territorial expansion, slavery and sectional strife, and the resulting Civil War and Reconstruction.

HIS 5514 Gilded Age and Progressive Era (3)
Examines the period in American history between 1877 and 1920. Topics covered include the results of Reconstruction, the development of the New South, agricultural decline and crisis, industrialization, urbanization, Progressive Era reform, the growth of America as a world power, and the causes and effects of World War I.

HIS 5515 Contemporary America(3)
Examines the political, economic, and cultural themes in American history from 1945 to the present. Topics covered include the effects of World War II, the origins and development of the Cold War, the Civil Rights Movement, other social movements of the 1960s and 1970s, the Vietnam War, the economic and political crises of the 1970s, the rise of conservatism in the 1980s, and the effects of America's rise to superpower status.

HIS 5517 Jacksonian America (3)
A study of the emerging American nation. Topics will include Jeffersonian and Jacksonian democracy, the market revolution and slavery, the Second Great Awakening and the rise of reform movements, Manifest Destiny, and the Mexican War.

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.

HIS 5521 African American History (3)
A study .of the history of African Americans from the 17th century to the present, including slavery, Civil War and emancipation, legalized discrimination, and the struggles for equality in post World War II American society.

HIS 5522 History of American Women (3)
A study of the history of women in America from the 17th century to the present, exploring the major economic, religious, social, and political ideas and developments which have shaped their status and role in American history.

HIS 5523 American Diplomatic History (3)
A study of the factors, forces, and functions in the making of American foreign policy from the 1760's to the present.

HIS 5530 Civil Rights Movement (3)

Study of the origins of the Civil Rights Movement in the late 19th century, 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 5533 Modern Russia (3)
The development of the revolutionary movements and tsarist reform attempts, World War I, the 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 5537 Interwar and World War II America (3)
A study of America in the years between the end of World War I and the end of World War II. Topics will include cultural and economic changes during the 1920s, the causes and effects of the Great Depression, the programs of the New Deal, and the diplomatic, cultural, and social causes and effects of World War II.

HIS 5538 The Cold War (3)
This course explores the history of the Cold War, focusing on its origins, the major events (the Korean War, the Cuban Missile Crisis, the Vietnam War, the Berlin Crises, and so on), and the collapse of the Soviet Union. The emphasis of the course is placed on analyzing newly available primary documents from Western and former communist sources and their impact on previous Cold War historiography.

HIS 5540 History of American Minorities (3)
A study of selected ethnic, racial, cultural, social, and religious minorities, their treatment within and their contributions to American society.

HIS 5541 American Constitutional Development (3)
American constitutional system with emphasis upon its origin and evolution via amendments and Supreme Court decisions.

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 Enlightenment Europe (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 The West in American History (3)
Study of the history of the American West from European contact to the present. Topics will include the role of the US government, the effects of American expansionism on immigrants and indigenous populations, and struggles over resources and territory.

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 5553 Late Antiquity (3)
Study of developments in the Mediterranean and Europe during the 3rd through 8th centuries, including the fall of the Roman empire and rise of barbarian kingdoms. The course examines the interrelatedness of economics, politics, warfare, and religion in shaping late ancient societies.

HIS 5564 The Crusades (3)
Study of the origins and execution of the series of religious wars called the crusades. In addition to analyzing the various campaigns, the course also examines the phenomenon in the context of social and cultural conditions in medieval Europe, Byzantium, and Islam.

HIS 5567 Medieval Europe (3)
Study of Western Europe and the Byzantine and Islamic worlds from the 7th century to the eve of the Renaissance. The course addresses the role of economics, politics, warfare, religion and intellectual activity in shaping medieval societies.

HIS 5574 Modern Eastern Europe (3)
This course examines political, economic, and social developments of 19th and 20th century Eastern Europe from the Revolutions of 1848 through the collapse of the Soviet block and beyond. The course analyzes the impact of the disintegration of Russian, Ottoman, and Habsburg empires on inter-war Eastern Europe; examines the establishment, development, and eventual collapse of communism in the region; and explores the dynamics of post-Cold War European integration.

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 Seminar in 19th Century American History (3)
An exploration of the major historical works and historiographical controversies in 19th century American history. Emphasis on discussion and student producing a major research paper.

HIS 6602 Seminar in 20th Century American History (3)
An exploration of the major historical works and historiographical controversies in 20th century American history. Emphasis on discussion and student producing a major research paper.

HIS 6603 Seminar in 18th Century American History (3)
An exploration of the major historical works and historiographical controversies in 18th century American history. Emphasis on discussion and student producing a major research paper.

HIS 6604 Seminar in Modern France (3)
The evolution of France from the formation of the Third Republic to the present. Emphasis on discussion and student producing a major research paper.

HIS 6610 Seminar in Comparative Revolutions (3)
An examination of the background, outbreak, development, and conclusion of the American, French, Russian, and other revolutions. Emphasis on discussion and student producing a major research paper.

HIS 6611 Seminar in 19th Century Europe (3)
An exploration of the major historical works and historiographical controversies in 19th century European history. Emphasis on discussion and student producing a major research paper.

HIS 6612 Seminar in 20th Century Europe (3)
An exploration of the major historical works and historiographical controversies in 20th century European history. Emphasis on discussion and student producing a major research paper.

HIS 6613 Seminar in British History (3)
An exploration of the major historical works and historiographical controversies in British history. Emphasis on discussion and student producing a major research paper.

HIS 6614 Seminar in 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. Emphasis on discussion and student producing a major research paper.

HIS 6615 Seminar in Latin American History (3)
Concentrated study in specialized areas with emphasis on 20th century history. Emphasis on discussion and student producing a major research paper. *Prerequisite: HIS 5583 or permission of instructor.*

HIS 6630 Foundations of Graduate Study in History (3)
Introduces the student to the basics of graduate work. Topics covered include the methods of historical research, writing, and citation as well as general themes and topics in historiography.

HIS 6632 American Historiography (3)
An overview of the major historical works and historiographical controversies in American history. Emphasis on discussion and students producing a major research paper.

HIS 6634 European Historiography (3)
An overview of the major historical works and historiographical controversies in European history. Emphasis on discussion and students producing a major research paper.

HIS 6640 Seminar in 17th Century American History (3)
An exploration of the major historical works and historiographical controversies in 17th century American history. Emphasis placed on discussion and students producing a major research paper.

HIS 6641 Seminar in Slavery (3)
An exploration of the major historical works and historiographical controversies in the history of slavery. Emphasis placed on discussion and students producing a major research paper.

HIS 6642 Seminar in Ethnicity/Race in America (3)
An exploration of the major historical works and historiographical controversies in the history of race and ethnicity. Emphasis placed on discussion and students producing a major research paper.

HIS 6643 Seminar in War and American Society (3)
An exploration of the major historical works and historiographical controversies in the history of war and its impact on American society. Emphasis placed on discussion and students producing a major research paper.

HIS 6650 Seminar in the History of Science (3)
An exploration of the major historical works and historiographical controversies in the history of science. Emphasis placed on discussion and students producing a major research paper.

HIS 6651 Thematic Historiography (3)
6652 An exploration of the major historical works and historiographical controversies in a specific topic not generally covered by the curriculum Emphasis placed on discussion and students producing a major research paper. Designed to fulfill the historiography component for the thematic secondary field.

HIS 6653 Seminar in Gender History (3)

An exploration of the major historical works and historiographical controversies in gender history. Emphasis placed on discussion and students producing a major research paper.

HIS 6660 Seminar in Holocaust and Genocide (3)
An exploration of the major historical works and historiographical controversies in holocaust and genocide studies. Emphasis placed on discussion and students producing a major research paper.

HIS 6665 Seminar in Medieval History (3)
An exploration of the major historical works and historiographical controversies in medieval history. Emphasis placed on discussion and students producing a major research paper.

HIS 6666 Seminar in Renaissance and Reformation Europe (3)
An exploration of the major historical works and historiographical controversies in European Renaissance and Reformation history. Emphasis placed on discussion and students producing a major research paper.

HIS 6667 Seminar in Age of Absolutism and Enlightenment (3)
An exploration of the major historical works and historiographical controversies in the history of European absolutism in the history of European absolutism and enlightenment. Emphasis placed on discussion and students producing a major research paper.

HIS 6670 Readings in the History of the Middle East (3)
Examines the region during the rise of Islam, the Ottoman Empire, and in the modern era. The course also addresses political, social, cultural, and economic developments since World War II.

HIS 6671 Readings in Modern East Asia (3)
Study of East Asian history since the rise of imperialist and militarist Japan in Asia in the 1930s, encompassing countries like China, Japan, Korea, and Vietnam. The course focuses primarily on China and Japan given these countries' cultural and/or political dominance in the region for most of the twentieth century.

HIS 6672 Readings in the History of Africa (3)
Study of 19th and 20th century political, social and cultural history of the region, including the partition of Africa by European powers and decolonization.

HIS 6673 Readings in Colonial Latin America (3)
Study of the history of Latin America from pre-Columbian times to the beginning of the independence movements of the early 19th century. Topics will include the indigenous populations, European colonialism and its effects, and the causes and early development of revolution.

HIS 6674 Reading in Modern Latin America (3)
Study of Latin America from the early 19th century to the present. Topics will include the cultural, social, political, and economic developments as well as international and U.S. relations in the area.

HIS 6675 Readings in History of Mexico (3)
A history of Mexico from pre-Columbian times to the present. The course follows social, cultural, political, and economic themes in Mexican history, as well as Mexico's relationship with the United States.

HIS 6676 Readings in the ABC Powers (3)
This course examines the social, cultural, diplomatic, political, and economic history of three of the largest and wealthiest Latin American nations — Argentina, Brazil, and Chile.

HIS 6677 Readings in the History of the Caribbean (3)
A history of the Caribbean region from pre-Columbian times to the present. Topics will include the indigenous population, European colonialism and its legacy, the impact of slavery and racial diversity in the region, cultural and political revolutions, and the area's relationship with the United States.

HIS 6678 Readings in Women, Health and History (3)
Explores the historical relationships between sex, gender, and medicine in the western world and improves students' cultural and historical literacy, understanding of major health issues in the health professions, the role of gender and sex in medicine and culture, and the diversity of medical and social practices.

HIS 6679 Readings in Infectious Diseases and History (3)
The course provides a study of the causes and effects of infectious diseases on major events in human history from the Neolithic revolution to the present. A selected case study will be presented.

HIS 6680 Teaching College History (3)
This course examines issues and pedagogy of teaching college-level history. Students will produce a course syllabus, develop and present lectures, and develop assessments for their course content. Students will also observe a variety of teaching styles and begin to understand benefits and problems of a variety of course delivery methods, including online teaching.

HIS 6695 Thesis Hours (3)
Directed research in selected areas of history, based on a student's proposal, related to the student's needs, and with the advice and approval of a faculty thesis advisor, and culminating in a research paper of appropriate depth and original scholarship. Grad ing will be on a Pass/Fail basis. *Prerequisite: Successful completion of 30 semester hours of graduate level history courses and admission to candidacy.* If taken online, this course is ONLY available in a 16 week format. On campus classes are available in the semester format.

HIS 6696 Selected Topics in History (3)
6697 An exploration of the major historical works and historiographical controversies in a specific topic not generally covered by the curriculum Emphasis

placed on discussion and students producing a major research paper.

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. 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. *All business foundation courses or equivalent are required for MBA, MSM, and MSHRM programs.*

HRM 6603 Human Resource Management (3)
The study of the management of people at work with emphasis on recruiting, selecting, training and evaluating personnel. The study of the use of technology to streamline HR activities. ***Must be taken during the first term.*** *Prerequisite: Graduate standing, admission into the MBA, MSM, or MSHRM programs and all undergraduate prerequisite courses or equivalents completed.*

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. *All business foundation courses or equivalent are required for MBA, MSM, and MSHRM programs.*

HRM 6619 Seminar in Human Resource Administration (3)
Analysis and discussion of current problems and issues in HRM. *All business foundation courses or equivalent are required for MBA, MSM, and MSHRM programs.*

HRM 6622 Workforce Planning and Staffing (3)
A study of theory, principles, and legal requirements for effective workplace planning, recruitment selection, and employment in organizational settings. The course provides an in-depth analysis of tools, techniques and statistical concepts applied to the fundamental HR function of workforce planning and staffing. *All business foundation courses or equivalent are required for MBA, MSM, and MSHRM programs.*

HRM 6623 Talent Development (3)
A study of concepts and practices critical to identifying human resources training and developmental needs critical to ensuring organizational effectiveness. *All business foundation courses or equivalent are required for MBA, MSM, and MSHRM programs.*

HRM 6625 Specialized Study in the Area of Human Resource
6626 Management (1-6)
6627 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. Prerequisite: All business foundation courses or equivalent.*

HRM 6632 Compensation and Benefits (3)
This course is designed to provide the student with both the theoretical and practical knowledge to design, administer, and evaluate compensation systems. It will address the application of both tangible and intangible forms of compensation to attract, motivate and retain employees. *All business foundation courses or equivalent are required for MBA, MSM, and MSHRM programs.*

HRM 6635 Employee Relations, Health, and Safety (3)
This course is designed to introduce the student to major law requirements, sound employee/labor relations practices, knowledge of safety legislation and design of effective safety programs. *Prerequisite: All business foundation courses or equivalent.*

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. *Prerequisite: All business foundation courses or equivalent.*

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 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 implementa-

tion 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. *A grade of B or better is required. Prerequisites: Successful completion of all required HRM core courses. Entrance into HRM 6698 may be permitted with Department head approval as long as only one core course has not been completed and it is being taken concurrently with HRM 6698.*

HEALTH SERVICES ADMINISTRATION

HSA 6625 Specialized Study in the Area of Healthcare
6626 Management (1-3)
6627 **S**tudy 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. The study must 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. *Prerequisite: All business foundation courses or equivalent.*

HSA 6680 Health Services Administration and Policy (3)
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. *Co or Prerequisite: BUS 5501*

HSA 6681 Legal and Social Issues in Health Administration (3)
Includes an examination of legal and ethical aspects of contemporary issues associated with the health services administration process. *Prerequisite: BUS 5501*

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. *Prerequisite: All business foundation courses or equivalent.*

HSA 6683 Healthcare Economics (3)
This course stresses economic analysis applied to the health services sector. Prerequisite: BUS 5501

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. *Prerequisite: All business foundation courses or equivalent.*

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. Grading system is Pass/Fail.*

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. *Grading system is Pass/Fail.*

INSTRUCTIONAL LEADERSHIP AND ADMINISTRATION

ILA 6603 Tools for Managing Educational Resources (3)
This course teaches instructional leadership candidates the skills and knowledge needed to conduct school business. Candidates will learn to manage a school's educational resources. This course will focus on the following areas: organizational skills, financial planning, facilities management, technology usage, and principles and best practices needed to manage a school. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6607 Readings in Leadership (3)
This course explores current literature and thinking in the field of organizational and administrative theory and practice pertaining to instructional leadership. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6609 Communication and Problem Solving (3)
This course is designed to improve the instructional leadership candidates' 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 diverse populations. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6610 Grant Writing (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 as dynamics involved in responding to a Request for a Proposal, and understanding the school system's bureaucratic structures. *Prerequisite: Admission into an NCATE approved instructional leadership program*.

ILA 6611 Community Relationships
The instructional leader realizes that there is great power in the community that can assist in increasing student achievement. This course will provide strategies that will enable the instructional leader to involve the community in meaningful ways and will result in significant student achievement. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6613 Legal Dimensions of Education (3)
Public schools are among the most regulated industries in the United States. Constitutional, Legislative , and Judicial mandates control everything from the length of the school day/year to who is qualified to teach. This course will examine the legal precedents that impact instructional leaders. Distinct attention will be given to special education law, Constitutional freedoms, personnel law, civil law and to federal and state mandates related to student accountability. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6625 Specialized Topics in Instructional Leadership (3)
A seminar concerned with an in-depth examination of one topic that is acutely important to instructional leadership. Candidates 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. *Pre-requisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6633 Instructional Leadership (3)
This course examines the essence of instructional leadership. It considers the importance of being able to develop and articulate a vision. The focus of the course centers on those leadership abilities and traits that promote student achievement for all students. Prerquisite*: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6640 Building and Maintaining Collaborative Learning Environments (3)
With the changes mandated by the 2007 reauthorization of the Individuals with Disabilities Act (IDEA), it is vital for instructional leaders to be aware of their responsibilities in the development and maintenance of collaborative learning environments. This course will present the most up-to-date research related to collaborative learning environments as well as how to establish and promote them. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6643 Human Resource Administration (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. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6658 Working with Diverse Populations (3)
According to recent demographic predictions, the American classroom will continue to increase in diversity. According to some estimates, within the next 20 years ethnic minorities will become the majority. To succeed in this changing world, instructional leaders must be prepared to lead a diverse learning environment. This course will provide instructional leadership candidates with the skills, abilities, dispositions, and strategies to foster learning environments where all children including those with special needs, can experience success. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6662 Orientation in Instructional Leadership & Administration (2)
This course is designed to orient the instructional leadership candidate to the expectations and requirements of the instructional leadership administration program. Course content includes assessments of learning approaches as well as leadership aptitudes and skills. The residency and mentoring components of the programs, as well as other program requirements are covered. *Pre-requisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6663 Practicum I (2)
The purpose of this course is to provide instructional leadership candidates with school-based experiences at the elementary, middle, secondary grade levels as well as the central office level supervised by full-time university faculty members and approved local mentors. The intern will gain school-based experiences in planning, for continuous improvement, teaching and learning, human resource development, diversity, community and stakeholder relationships, and technology. *Pre-requisites:* ILA 6662. *Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6664 Practicum II (2)
The purpose of this course is to provide instructional leadership candidates with school-based experiences at the elementary, middle, secondary grade levels as well as the central office level supervised by full-time university faculty members and approved local mentors. The intern will gain school-based experiences in leading, teaching, and learning. *Prerequisites: ILA 6663. Restricted to candidates* who *are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6684 Curriculum and Instructional Strategies (3)
Which instructional practices support the highest gains in student achievement? If one reads the publicity enclosed with new programs, they all do! How is the busy instructional leader to know how to separate the genuine instructional practice from the fad? This course examines the current research that supports student learning and engagement. In order for instructional leaders to promote effective learning environments, they must be able to understand, identify, and apply effective learning theories and methodologies. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 6691 Research Methods (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. *Prerequisite: Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program. A grade of "B" or better is required.*

ILA 6692 Using Data to Make Decisions (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. Candidates will also learn to collect data from teacher and student observations to obtain knowledge concerning teacher evaluation. *Prerequisites: ILA 6691. Restricted to candidates who are admitted to a State of Alabama approved Instructional Leadership & Administration program.*

ILA 7700 Adult Learning Theories and Managing Change (3)
This course will focus on the examination of how adults learn in instructional settings and managing change. The adult learners' characteristics will be examined. Adult learning theory and current trends on advancement in adult learning and managing change will be examined. The focus will be on preparing the student to make better instructional decisions and use of resources in the education and training of adults.

ILA 7702 Involving Parents and Community Stakeholders (3)
The focus of this course is on the successful school and what it must do to garner parental involvement and community support that it needs. This course is a combination of theory of community relations (why must communities support local schools to achieve their goals?) and a primer on how to develop the family and community partnership which will help the school to achieve its goals.

ILA 7703 Law, Ethics, and Policy Development (3)
This course considers the relationship between policy and school operations. The candidate will have the opportunity to explore firsthand the creation, development and evaluation of policy, specifically educational policy. A review of ethics and the law will help to understand the role that policy plays in the daily affairs of education.

ILA 7717 Mentoring (3)
The purpose of this course is to prepare educational leaders to serve as role models and mentors for individuals. The educational leaders will develop methods, techniques and organize mentorship programs. Leaders will develop a knowledge base upon which to make informed reflective decisions about mentorship programs in diverse educational settings.

ILA 7740 Creating Effective Learning Environments (3)
Instructional leaders must work within the framework of the Individual with Disabilities Education Act (IDEA) in order to effectively create, develop and maintain a highly efficient learning environment. This course will present best practices and the most up to date research related to the creation of effective learning environments within the public schools. The focus of the course will be both theoretical and practical in nature. As a result of the course, instructional leaders will be able to establish, develop, maintain and evaluate instruction in order to build an effective learning environment.

ILA 7746 Organization and Human Resource Development (3)
The greatest asset any organization possesses is its employees. Current research indicates that organizations routinely report 80% of the expenses go to employee compensation. This figure underscores the need for skills to increase the performance of this very important asset. This course examines the leadership of human resources and what it takes to create an environment where employees can thrive.

ILA 7791 Current Trends and Issues in Instructional Leadership (3)
Examines the trends and issues that arise impacting educational policy. Emphasizes group and individualized integration of theory and application of professional knowledge toward a given trend and /or issue affecting public education from a national, state, or school-based level.

ILA 7792 Advanced Comprehensive Research Strategies (3)
This course is intended to explore the concepts of quantitative and qualitative research methods application for research in education. Participants apply their skills in research design by completing a pro-

posal for a substantive study related to the improvement of instructional services. *A grade of "B" or better is required.*

ILA 7793 Program Evaluation (3)
This course focuses on a variety of concepts and strategies associated with effective planning in Educational and Human Services organizations.

ILA 7794 Research in Action (3)
The purpose of this course is to provide instructional leaders with a study of the processes involved in identifying, framing, evaluating, analyzing and seeking information about problems faced by schools. The goal for the student is to propose a research and implement a study that examines a problem currently impacting the K-12 school setting.

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)
An examination of the foreign policies processes of the United States including 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 5540 Conflict Processes (3)
This course introduces students to the literature and methodological approaches relating to the study of war and violent conflict as political and social processes. It focuses on causes and patterns of conflict at the interstate and intra-state levels. Topics include the bargaining theory of war, the role of domestic politics in conflict, economics and conflict, civil wars, and militarized interstate disputes.

IR 5541 Middle Eastern Security (3)
This course provides an examination of Middle Eastern security issues using international relations and comparative politics theories. Topics include conflict between Sunni and Shi'a Muslims, conflicts involving ethnic and religious minorities such as Kurds and Druze, democratization, relations and tensions with the West including recent military and development operations, and Saudi Arabia's "special relationship" with the United States, and conflict involving non-state actors, and nuclear politics with Iran.

IR 5542 Diplomacy (3)
This course provides an examination of diplomacy in International Relations, viewed from both theoretical and practical perspectives. Topics will include fundamentals in the practice of statecraft, including negotiation and conflict resolution, and the difference between public and private diplomacy, ethics and morality in diplomacy, and the continually evolving nature of diplomatic practices.

IR 5543 Middle Eastern Political Economy (3)
This course provides an examination of Middle Eastern political economy issues using international relations and comparative politics theories. Topics include the politics of oil, the role of Islam, the legacy of colonialism in economic development, the impact of globalization on economics in the region and the potential for economic reforms.

IR 5544 European Political Economy and the European Union (3)
This course provides an examination of European political economy issues using international relations and comparative politics theories, with specific attention to the European Union. Topics include models of economic and political integration, the evolution, development, structure and function of the E.U., and economic relations between E.U. countries and the world.

IR 5551 Survey of International Relations (3)
A survey of the discipline of International Relations (IR) introducing IR theory, power, national interests, instruments of foreign policy, international law and organizations, international political economy, comparative government, and research methodology.

IR 5552 International Law (3)
An examination of the sources and development of international law from historical, political, legal, and philosophical standpoints, with emphasis on substantive areas of law.

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. *Note: MSIR candidates must achieve a grade of "B" or better in IR 6601 to complete degree program requirements.*

IR 6602 Geostrategic Studies (3)
An examination of 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)

An examination of 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 6616 East Asian Security (3)
This course provides an examination of East Asian security issues using international relations and comparative politics theories. Topics include nuclear proliferation in North Korea, military upgrades in China, territorial disputes, rising nationalism, Association of Southeast Asian Nations (ASEAN), and the United States' role in the region.

IR 6620 International Political Economy (3)
An examination of the interrelationships between international politics and economics covering theories of International Political Economy, states and markets, trade, foreign investment, international monetary affairs, foreign aid, state development strategies, and globalization.

IR 6621 East Asian Political Economy (3)
This course provides an examination of East Asian political economy issues using international relations and comparative politics theories. Topics include economic development in Japan, China, and on the Korean Peninsula, economic development and democratization, regional and global economic integration and discussion of the relationship of economics to security in the region.

IR 6622 European Security (3)
This course provides an examination of European security issues using international relations and comparative politics theories. Topics include political and military integration, examining both NATO and the European Union, NATO expansion, relations between Western Europe and Russia, European peacekeeping, the United State-Europe relationship, and comparative security and foreign policy.

IR 6623 Arab-Israeli Conflict (3)
This course focuses on the Arab-Israeli conflict since 1948 with a special focus on the challenges to conflict resolution on both the Arab and Israeli sides and the role great powers play in Middle Eastern politics. The course will begin by examining the major historical events from the birth of Israel to the present day. Attention will be given to important groups, events, movements that will allow the complexity of this relationship to come to light. Additionally, the course will focus on the relationship between the West, particularly Europe and the United States, and the Middle East.

IR 6624 Geopolitics of Eurasia (3)
This course provides an examination of geopolitical issues and power politics across Eurasia. Topics include the Putin Doctrine, Russian regional hegemony and the legacy of the Soviet Union, regional integration, the role of natural resources in power politics, and the increasing prominence of Central Asia in international politics.

IR 6625 Specialized Study in International Relations(3)
6626
6627
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 6631 Intercultural Relations (3)
An analysis of the influence of culture on interstate relations including theories, concepts, and applications.

IR 6634 Tradition, Revolution, and Change (3)
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 sociopolitical change within various nations and states.

IR 6635 National Security Policy (3)
An examination of the structures, motivations, 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 government and politics of developing states including economic, social, and cultural perspectives and strategies pursued for growth and development.

IR 6641 Comparative Politics of Latin America (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 Comparative Politics of Russia and Eastern Eu rope (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 Comparative Politics of the Middle East (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 Comparative Politics of East Asia (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 6646 Comparative Politics of South Asia (3)
An examination of the intrastate and global relationships of South Asia; the course will focus on India and Pakistan, but also cover Bangladesh, Sri Lanka, and additional states in South Asia to engage the student in the security, political, cultural, and social aspects of the region..

IR 6647 Comparative Politics of Western Europe (3)
An examination of Western Europe and the European Union, including state and EU politics, legal systems, economics, culture, military power, geography, and their impact on regional relations and linkages to the world system.

IR 6648 Comparative Politics of Sub-Saharan Africa (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 6650 Environmental Security, Conflict and Development (3)
An analysis of how environmental issues such as resource scarcity, desertification, loss of biodiversity, global warming, etc., may influence development and/or affect the national security of nation-states, communities and individuals. The course also examines the evolution and function of global environmental governance institutions including international organizations (IGOs), transnational non-governmental organizations (NGOs), and legal/ regulatory structures.

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 6655 International Conflict Management (3)
An analysis of 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 such as 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 including the effectiveness of political communications, public relations, foreign aid, economic sanctions, threats of force, and limited uses of force.

IR 6660 Military Strategy and International Relations (3)
An examination of the core ideas of classical and contemporary military strategists, the international context that inspired their strategic concepts, and a review of the interaction and influence of armed forces and their leadership and strategies on national security policies and interstate relationships.

IR 6665 Readings in International Relations (3)
A guided program of readings and study in international relations 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.*

IR 6668 Thesis (3)
6669 A 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; the second course will be undertaken to support the actual writing of the thesis. *Prerequisites: IR 6601 and the satisfactory completion of 30 semester hours in the MSIR program. Grading system is Pass/Fail.*

IR 6681 Tribalism and Colonialism in Africa (3)
An investigation of the politics that govern tribalism and colonialism, the sociological influences it has induced, and how the two concepts impact the people of Africa today.

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 6686 Latin American Security (3)
This course provides an examination of Latin American security issues using international relations and comparative politics theories. Topics include the production and trafficking of narcotics, human trafficking and immigration, and the formulation of US drug and immigration policy.

IR 6687 Latin American Political Economy (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 6688 Political Islam (3)
An advanced seminar dealing with the theology and practice of Islam and its impact on international, legal, political, security, and social issues.

INFORMATION SYSTEMS

IS 6625 Specialized Study in the Area of Information
6626 Systems (1-3)
6627 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. The study must 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 ex-

ceed six semester hours. A specialized study may be substituted for a required course only once in a student's program. *Prerequisite: All business foundation courses or equivalent.*

IS 6660 Introduction to Data Analytic Strategies and Applications (3)

This course focuses on developing new insights and understanding of organizational performance based on data and quantitative methods. The course introduces the fundamentals of interpreting data, performing data analysis, understanding the data, visualizing the data and communicating with the data into actionable insights. Topics of study include qualitative and quantitative data analysis, fundamental tools and techniques for data manipulation using software tools, visualization, and decision making methodologies.

IS 6662 Big Data Analytics and Business Decision Support (3)

This course introduces the concepts and practices of Big Data analytics and its application to executive business decisions that enhance business competitiveness. Students will learn how to utilize Big Data methodologies and analytic software to interpret and visualize large data sets into meaningful and useful information for business use. The course also includes case studies in how major businesses have used big data to gain new perspectives and insights that enabled new competitive advantages and marketing advantages.

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: All business foundation courses or equivalent.*

IS 6674 Information Systems in the Global Economy (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: All business foundation courses or equivalent.*

IS 6675 Information Security and Assurance in a Global Economy (3)

This course introduces the various technical and administrative aspects of information security and assurance within a global networked environment and provides the foundation for understanding the key issues related to them. Topics covered include inspection and protection of information assets, detection of and reaction to internal and external threats, determining the levels of protection needed, and the design of a consistent, reasonable information security architecture along with an implementable process. Other topics include technical and managerial aspects of a wide range of policies and issues relating to reporting and monitoring, upgrading and patching, intrusion detection, maintenance and mining of security logs, backup and recovery, and global issues related to trans-border data flow and intellectual property rights. *Prerequisites: Graduate standing, admission into the MBA program and all undergraduate business prerequisite courses or equivalent completed.*

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: All business foundation courses or equivalent.*

IS 6677 Leadership Series on Information Technology (Seminar Course) (3)

This course consists of seminars and a final semester student research paper. Seminars will be given by information technology (IT) leaders; each seminar will be followed by a session of questions and informal gathering. Seminar topics and speakers chosen based on the progression of other courses in the program and will have an international context. Each semester, students have the opportunity to complement their in-class learning experience with related practical experience from IT leaders. At the end of the semester, students must submit a quality written research paper to be presented in class or at a conference.

IS 6678 International Information Technology Project Management (3)

This course discusses the processes, methods, techniques, tools, issues, and practices that organizations use to manage their international information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course assumes that project management in a global organization is a complex team based activity, where various types of technologies including project management software as well as software to support group collaboration are an inherent part of the project management process. This course also acknowledges that project management involves both the use of resources from within the firm, as well as contracted from outside the organization. *Prerequisites: Graduate standing, admission into the MBA program and all undergraduate business prerequisite courses or equivalents completed.*

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: All business foundation courses or equivalent.*

JOURNALISM

JRN 6615 Public Relations and Strategic Communication
Students will examine how the changing media environment affects outreach methods and explores practical solutions to achieve communication goals. Emphasis is placed on crisis public relations problems. Topics include the importance of research, designing a strategic communication program, advertising and the pervasive effect of public relations.

JRN 6640 Communication Law and Ethics (3)
This course provides students with an in-depth understanding of existing communication ethics, regulations and policies along with their application to media. Students will study how these legal doctrines and ethical considerations have evolved and will continue to evolve.

KINESIOLOGY AND HEALTH PROMOTIONS

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.

KHP 6604 Statistical Analysis and Interpretation (3)
This course requires graduate students to utilize statistical fundamentals, analyses, and interpretation of statistics. Statistical information includes, but is not limited to, sampling, hypothesis testing, regression, frequency distributions, t-tests, parametric and nonparametric statistical techniques, multivariate data analysis (MANOVA), and others using SPSS and other statistical software.

KHP 6610 Physical Education, Sport and the Law (3)
The course is designed to provide students with an in-depth awareness and understanding of legal responsibilities of sport managers, coaches, and administrators. Emphasis will be placed upon critically analyzing the legal theories, structures, statutes, case law, and standards that apply to the sport industry and that impact sport organizations. Substantive legal areas include tort, constitutional, antitrust, intellectual property, agency, contract, and business law.

KHP 6615 Organizational Behavior & Leadership in Sport (3)
In this course students will study the basic concepts, theories and organization of administration including financial management as applied to sport, physical education, and recreation.

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 Research Methods I (3)
An independent exploration of the literature and current research in the fields of Health Education and Physical Education. *A grade of "B" or better is required.*

KHP 6620 Physical Fitness: A Critical Analysis (3)
This course is designed to prepare the student for the American College of sports Medicine (ACSM) Health Fitness Specialists (HFS) certification. The course will examine the process of pre-participation health screening and risk stratification, administration of physical fitness assessments, and interpretation of results and the development of appropriate exercise prescriptions used in the evaluation and improvement of human fitness. *Prerequisite: KHP 6650*

KHP 6623 Biomechanics of Sport Techniques (3)
This course is designed to prepare the student for the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) certification. The course explores basic biomechanical concepts and their application in the analysis of sport technique. Students will apply scientific knowledge to examine sport-specific testing assessments and interpretation of results, and practice the implementation of safe and effective training techniques for the goal of improving athletic performance. *Prerequisite: KHP 6650*

KHP 6625
6626
6627 Specialized Study in KHP (1-3)
A study of the 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 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 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 Sport Nutrition and Exercise Metabolism (3)
This course examines established dietary requirements of athletes relative to performance, training, and recovery. Emphasis will be placed on the use of peer reviewed literature to understand the importance of pre– and post-event nutrition, nutritional

issues faced by athletes, and possible ergogenic strategies, foods, and dietary supplements. Examination of metabolic pathways and will allow advanced interpretation of the metabolism and macronutrients during conditions of exercise and disordered metabolism. *Prerequisite: KHP 6670*

KHP 6670 Exercise Physiology (3)
This course examines acute and chronic physiological responses to the respiratory, cardiovascular, and musculoskeletal systems to the demands of exercise. Contributions made by aerobic and anaerobic metabolism to energy production will be examined. The contribution of various physiological variables will be investigated to facilitate an understanding of the physiological basis of human performance.

KHP 6671 Advanced Exercise Physiology (3)
This course will allow students to experience and explore advanced concepts, topics, and laboratory techniques related to exercise physiology. Material covered in this course will prepare students to interpret, conduct, and share advanced material with their peers. Students will have the opportunity to implement an advanced research project or commence thesis-related research. *Prerequisite: KHP 6650*

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 6680 Practicum in Physical Education (3)
A supervised application of concepts, principles, instructional, curriculum, and delivery skills acquired by students in previous coursework. Students will identify issues regarding classroom management, testing, and evaluation in physical education. Students will explore innovative ideas for the classroom and research peer reviewed journals for information for application in the classroom setting.

KHP 6690 Internship (3)
A 400-hour supervised experience in planning, staging, and evaluating a formal practicum in related field.

KHP 6691 Research Methods II (3)
This course examines the variety of research methods and reporting methods used in health & physical education research. A grade of "B" or better is required. *Prerequisite: KHP 6604 and KHP 6617 with a "B" or better.*

KHP 6694 Thesis I (3)
Independent research leading to the preparation of a scholarly paper related to sport and fitness management topic under the supervision of the student's advisory committee. The student's advisory committee will administer an oral examination covering the research and findings. Grading system is Pass/Fail.

KHP 6695 Thesis II (3)
Independent research leading to the preparation of a scholarly paper related to sport and fitness management topic under the supervision of the student's advisory committee. The student's advisory committee will administer an oral examination covering the research and findings. Grading system is Pass/Fail.

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. *Prerequisite: LAW 2221 or equivalent and all business foundation courses or equivalent.*

LAW 6610 Legal Issues 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 ethics, professional and legal responsibilities, agency, contracts, Uniform Commercial Code, debtor-creditor relationships, government regulation of business, and business structure. 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. *Prerequisite: All business and accounting prerequisites.*

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.

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.

All Marine Biology courses for graduate students have the prerequisites of General Chemistry and Ecology, or the equivalents.

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.

MB 5503 Marine Vertebrate Zoology (4)
A study of the biology of marine vertebrates emphasizing systematics, behavior, physiology, and ecology of local forms.

MB 5504 Marine Botany (4)
A general survey of algae and vascular plants associated with the marine and estuarine environment.

MB 5510 Introduction to Oceanography (4)
A general introduction to the physics, chemistry, geology, and biology of the oceans.

MB 5519 Marine Aquaculture (2)
Techniques in live animal culture with an emphasis on basic principals that can be applied to the culture of any organism for research, display, or commercial profit.

MB 5523 Marine Ecology (4)
Lecture and laboratory studies of bioenergetics, community structure, population dynamics, predation, competition, and speciation in marine ecosystems.

MB 5528 Shark and Ray Biology (2)
An introduction to the biology of sharks and rays, with special emphasis on regional shark fauna and field techniques.

MB 5532 Biology and Conservation of Marine Turtles (2)
An overview of the biology and conservation of marine turtles, including identification, distribution, nesting behavior, migratory behavior, and feeding ecology.

MB 5538 Coastal Wetlands Ecology (4)
The course will focus on coastal and near shore wetland areas, with an emphasis on the biogeochemical processes that occur within.

MB 5560 Introduction to Neurobiology (4)
The study of the structure, development, physiology, and pharmacology of the nervous systems and sense organs. *Prerequisite: Permission of the instructor.*

MASTER OF BUSINESS ADMINISTRATION

MBA 6611 Business Strategy (3)
This course is the capstone course in the MBA 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 MBA program. Students are required to complete the graduate Educational Testing Service Major Field Test and a Capstone Examination in this course. *Prerequisites: Completion of a minimum of 24 semester hours in the MBA program, with a "B" average or better, including the following courses: ACT 6691, ECO 6655, FIN 6631, MKT 6661 and QM 6640; or approval of the department chair. Students should be in the last term of their program when completing this course.*

MANAGEMENT

MGT 6615 Ethical Leadership and Management in a Global Economy (3)
Equips students with the critical leadership skills and solid understanding of today's ethical theory they need to become effective business leaders in today's turbulent times. The class explores the latest thinking in leadership theory and contemporary practices at work within organizations throughout the world. Closely connects theory to recent world events, such a the Wall Street meltdown, ethical scandals, and political turmoil. Students examine emerging topics, leadership vision and courage, leading virtual teams and actual leadership decisions. *A grade of "B" or better is required.*

MGT 6625 6626 6627 Specialized Study in Management (1-6)
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 appropriate dean. 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. Prerequisites: All business foundation courses or equivalent.*

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. *Prerequisites: All business foundation courses or equivalent.*

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 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 rles played by management and labor in carrying out both production and service delivery, and application of selected quantitative techniques to support those processes. *Prerequisites: All business foundation courses or equivalent.*

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. *Prerequisites: All business foundation courses or equivalent.*

MGT 6675 Theory of Organizations (3)
The study of general business management from a structural standpoint: planning, organizing, staffing, directing, and controlling. *Prerequisites: All business foundation courses or equivalent.*

MGT 6677 Systems Management (3)
The study, design, implementation and operation of a system within the organization. *Prerequisites: All business foundation courses or equivalent.*

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 hospitable 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. *Prerequisites: All business foundation courses or equivalent.*

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. *The course may not be transferred into the MSM program. Students are required to complete the graduate Educational Testing Service Major Field Test and a Capstone Examination in this course. A grade of "B" or better is required. Prerequisites: Must have completed 18 semester hours to include BUS 6610 (with a grade of "B" or higher), and MGT 6600, MGT6627, MGT 6671, and FIN 6631 (all with a grade of "C" or higher) and one other 3 SH course in either the concentration or an elective with a grade of "C" or higher.*

MARKETING

MKT 6661 Global Strategic Marketing (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 resource and strength with global marketing opportunities, and strategies to overcome environmental threats. *Prerequisites: Graduate standing, acceptance into the MBA program, all undergraduate business prerequisite courses or equivalent completed.*

MASTER OF SCIENCE IN MANAGEMENT

MSM 6610 Theories of Organizational Behavior (3)
This course is the study of the theories and concepts of individual leaders and group behaviors within organizations. The course examines important behavioral processes, including learning, perception, attitudinal structuring, values, motivation, communication, conflict, quality, and social reinforcement. Emphasis is placed on the relationship of these processes to individual and group performance and their implications for leadership and decision-making. *Prerequisite: Admission into the MSM degree program.*

MSM 6630 Management Information Systems for Leaders (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: Admission into the MSM degree program.*

MSM 6633 Leading and Developing High Performance Teams (3)
An in-depth study of the process of developing a new team or revitalizing an existing team. The course will involve the study and application of current theories of team development and performance in the work setting. Special emphasis will be placed on the leadership of work teams in both face-to-face and virtual settings for effective performance and member satisfaction.

MSM 6635 Leadership of Innovation and Change (3)
The study of management concepts and practices useful in improving organizational performance. Theories and concepts applicable to making organizations more hospitable 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. *Prerequisite: Admission into the MSM degree program.*

MSM 6640 Foundations of 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. *Prerequisite: Admission into the MSM degree program.*

MSM 6645 Continuous Improvement (3)
Analysis of Total Quality Management (TQM) and the driving philosophy, including leadership, human resource management and human resource development, strategic planning, implementation, methods, benchmarking, results, and the principles of closing the loop. Case analyses used to illustrate TQM as a systemic approach to organizational effectiveness using the Baldrige Criteria. *MSM core requirement;*

potential MBA unspecified elective; potential MSHRM elective. Prerequisite: MSM 6610.

MSM 6650 Strategic Management (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: completion of at least 15 semester hours in the MSM core. Students should be in their last term or semester of their program when completing this course. A grade of "B" or better is required.*

MSM 6655 Advanced Leadership (3)
The leadership concentration capstone course provides an in-depth examination of leadership theory and practical applications. Aspects of leadership are examined relative to change management, implementation, and communication, with an emphasis on ethical behavior, team and global leadership, team development, the learning organization, role modeling, and employee development. Analysis of cases and workplace situations focus on integrating theory and application.

MATHEMATICS

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

MTH 5512 Discrete Mathematics (3)
Topics include counting techniques such as Pigeonhole Principle, permutations, combinations, binomial coefficients, inclusion-exclusion, and relations and graphs.

MTH 5520 Graph Theory (3)
The elements of graph theory including: trees; bipartite, chordal and planar graphs; graph coloring; graph traversals; and flows *Prerequisites: 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. *Prerquisite: MTH 3331.*

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. *A grade of "B" or better is required.*

MUSIC

MUS 6600 Band Performance (1)
This course covers rehearsal/performance through band literature

MUS 6601 Choral Performance (1)
This course covers rehearsal/performance through choral literature

MUS 6605 Advanced Music Technologies (3)
Advanced educational use of multimedia and internet based music technologies.

MUS 6607 Literature and Techniques for the Beginning/Middle School Band (3)
A study of the materials and techniques utilized in the beginning/middle school band program. Listening and score analysis will be included.

MUS 6610 Advanced Woodwind Pedagogy (3)
A study of teaching techniques, materials, and repertoire for woodwind instruments.

MUS 6612 Advanced Music Program Administration (3)
An intensive study of the administration, curriculum, organization, and teaching techniques of school music programs.

MUS Private Instruction (1)
Private instruction is available in the following areas:

6614 Piano
6615 Organ
6616 Voice
6617 Clarinet
6618 Oboe
6619 Flute
6620 Bassoon
6621 Saxophone
6622 Trumpet
6623 Horn
6624 Trombone
6644 Guitar
6645 Euphonium
6646 Tuba
6647 Percussion
6648 Conducting

MUS 6654 Music Pedagogy 1
Alabama Music Educators Association In-Service Conference. Attendance and written portfolio is required.

MUS 6655 Music Pedagogy 2

Troy University High School Honor Band or Choir Clinic. Attendance and written portfolio is required.

MUS 6656 Music Pedagogy 3
Troy University Middle School Honor Band Clinic. Attendance and written portfolio is required.

MUS 6625 Specialized Study in Area of Music (1- 3)
6626
6627 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. See semester hour limits listed under Course Restrictions in the General Regulations section.

MUS 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. *Prerequisite: A survey of Special Education Course is required if not previously completed.*

MUS 6631 Advanced Rehearsal Techniques (3)
Teaching music through performance in context.

MUS 6638 Literature Analysis (3)
Historical and theoretical analysis of masterworks for band or choir.

MUS 6639 Computer-based Music Notation (3)
An exploration of music notation software. Students will use industry standard notation software to design and produce musical scores, parts, and assignments to be used in a K-12 educational setting.

MUS 6653 Educational Evaluation in Music (3)
Advanced study in music assessment.

MUS 6657 Advanced Brass Pedagogy (3)
A study of teaching techniques, materials, and repertoire for brass instruments.

MUS 6658 Advanced Percussion Pedagogy (3)
A study of teaching techniques, materials, and repertoire for percussion.

MUS 6660 Legal Issues in Music Education (3)
This course will provide an overview of our legal system, examine court cases in music/music education and identify the implications studied from this review to assist the practicing music educator

MUS 6662 Advanced Arranging (3)
A study of advanced arranging and scoring concepts for instrumental or choral ensembles.

MUS 6670 Practical Band Instrument Repair (3)
This course covers the maintenance, repair, and supervision of equipment used by music educators.

MUS 6680 Leadership in Music Education (3)
The course will focus on principles of leadership as they relate to the music educator and conductor.

MUS 6685 Music Pedagogy 4 (3)
Troy University Summer Band Clinic. Attendance and written portfolio required.

MUS 6686 Music Pedagogy 5 (3)
Troy University Summer Band Clinic. Attendance and written portfolio required.

MUS 6691 Research Methods (3)
Research methods will provide the student with a detailed examination of types of research and reporting and a working knowledge of research terminology and data analyses as applied to the field of music.

MUS 6696 Practicum (2 credit hours)
Application of professional knowledge, skills, and attitudes through discussion of historical and philosophical highlights of music education. Includes completion of an individual music project/ presentation.

NURSING

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

NSG 6604 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.

NSG 6605 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 and healthcare policy.

NSG 6606 Curriculum Development in Nursing Education (3)
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.

NSG 6610 Power, Politics, and Policy Formulation in Nursing (3)
Analysis of the relationship of power, politics, and policy formulation to nursing and healthcare.

NSG 6612 Advanced Health Assessment (3)
Designed to prepare 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. *Co-requisite: NSG 6613 (FNP) or NSG 6618 (CNS).*

NSG 6613 Advanced Health Assessment Preceptorship (3/9)
Preceptorship course designed for clinical applica-

tion of skills in advanced health assessment, clinical diagnosis and management, and maintenance of health promotion/disease prevention in the role of the primary care family nurse practitioner. *Prerequisites: NSG 6671 and 6649 Co-requisite: NSG 6612.*

NSG 6616 Role of the Nursing Administrator (2)
Assists students to evaluate the role of the nurse administrator. Explores principles of ethical and critical decision-making, quality improvement, and communication for management and resolution of issues and conflicts within the functional role. Examines use of research, evidence, and outcome data for informed decision-making and consideration of factors that influence policy making within the nursing organization. *Prerequisite for MSN students: NSG 6604, 6660, 6691, 6692 and clinical specialty courses. Prerequisite for DNP students: NSG 6604, 6691, and clinical specialty courses. Co-requisite: NSG 6617.*

NSG 6617 Nursing Administration Internship (3/12)
Provides opportunities to apply management theories basic to nursing, administration. Includes supervised experiences in role of nurse administrator. *Prerequisite for MSN students: NSG 6604, 6660, 6691, 6692 and CNS clinical specialty courses. Prerequisite for DNP students: NSG 6604, 6691, and CNS clinical specialty courses. Co-requisite: NSG 6616.*

NSG 6618 CNS Advanced Health Assessment Practicum (1/2)
Clinical laboratory course 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. *Co-requisite: NSG 6612.*

NSG 6620 Advanced Adult/Gerontology Care I (2)
Introduces the role of the adult/gerontology clinical nurse specialist. Presents concepts, principles, and skills necessary to provide evidence based advanced practice nursing care for culturally diverse younger adults (older adolescents) through older adults. Emphasizes normal growth and development, health promotion, disease prevention and early detection, and management of common health problems in a variety of settings. *Co-requisite: NSG 6621. Prerequisites: NSG 6604, 6612, 6618, 6671.*

NSG 6621 Advanced Adult/Gerontology Care I Preceptorship (3/9)
Provides clinical preceptorship opportunities for the clinical nurse specialist student to apply concepts, principles, and skills necessary to provie evidence based advanced practice nursing care for culturally diverse younger adults (older adolescents) through older adults in a variety of settings. *Co-requisite: NSG 6620. Prerequisites: NSG 6604, 6612, 6618, and 6671.*

NSG 6622 Advanced Adult/Gerontology Care II (2)
Focuses on the clinical nurse specialist's role in the management of younger adults (older adolescents) through older adults who are physiologically unstable, technologically dependent and/or highly vulnerable to complications. Emphasizes increasing the students' knowledge and decision-making skills in order to accurately assess, diagnose and manage complex, acute and critically ill or injured adults. *Prerequisites: NSG 6620, 6621, 6604, 6660, 6691, 6692. Co-requisite: NSG 6623, 6649.*

NSG 6623 Advanced Adult/Gerontology Care II Preceptorship (3/9)
Provides clinical preceptorship opportunities for care of the younger adult (older adolescent) through older adults in acute care settings. Assumes the role of expert clinician and consult in care for adults with acute health problems by focusing on direct care competencies. *Prerequisites: NSG 6620, 6621. Co-requisites: NSG 6622.*

NSG 6625 Specialized Study in Advanced Nursing (1/4)
6626
6627
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, Su See semester hour limits listed under Course Restrictions in General Regulations section.*

NSG 6631 Concepts of Health Care Informatics (3)
An examination of concepts and technologies in the context of the healthcare delivery environment. Issues and applications addressed include hardware and software basics, data management, the Internet eCommunication, and security.

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. *Co-requisite or Prerequisite: NSG 6604.*

NSG 6633 Healthcare Information Systems (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. *Prerequisites: NSG 6631, 6632.*

NSG 6634 Role of the Nursing Informatics Specialist(2)
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. *Prerequisites: Completion of nursing specialty courses for Nursing Informatics Specialist. Co-requisite: NSG 6636.*

NSG 6635 Informatics Applications (3)
Integrates informatics concepts and tools in the healthcare environment. Addresses regulatory, security, electronic communication, ergonomics, electronic health records, clinical decisions support systems, human-computer interactions, and emerging technologies. *Prerequisite: NSG 6633.*

NSG 6636 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. *Prerequisites: Completion of nursing specialty courses for Nursing Informatics Specialist. Co-requisite: NSG 6634.*

NSG 6638 Advanced Adult/Gerontology Care III (2)
Focuses on the clinical nurse specialist's role in facilitating care transitions across the lifespan from younger adults (older adolescents) through elderly adults with chronic and complex health problems, including multisystem problems. Emphasizes management and negotiation with interdisciplinary teams across multiple health care systems for achievement of outcomes. Provides an overview of health and social policy issues relevant to adults across the lifespan, advanced practice nursing roles, advocacy and case management. *Co-requisite: NSG 6639. Prerequisites: NSG 6622, 6623.*

NSG 6639 Advanced Adult/Gerontology Care III Internship (3/12)
Provides clinical internship opportunities for the clinical nurse specialist student caring for younger adults (older adolescents) through older adults with chronic and multisystem health problems in varied care settings and in transitions across settings. *Co-requisite: NSG 6638. Prerequisite: NSG 6622, 6623.*

NSG 6645 Family and Cultural Theories in Advanced Nursing Practice (3)
Provides the student with in-depth knowledge of family and cultural assessment. Further analysis of diverse cultures and multi family structures enhance the student's application of family and/or cultural theories and advanced nursing interventions.

NSG 6649 Advanced Pharmacology (3)
Presents knowledge and theory critical to management of the pharmacological needs of a variety of populations across the lifespan. Discusses major classification of drugs and protocols for administration and use of technology in management of drug therapy.

NSG 6660 Foundations of Advanced Practice (3)
Provides content that enables students to focus on the advanced practice nurse's role in healthcare. Emphasizes the theoretical bases critical to leadership in the advanced practice role. Analyzes current issues in regards to advanced practice roles.

NSG 6665 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 patients in primary care settings. *Prerequisites: NSG 6612 and 6613. Co-requisite: NSG 6666.*

NSG 6666 Primary Care I Preceptorship (3/9)
Clinical preceptorship course in the advanced practice role of the family nurse practitioner with pediatric patients and women of childbearing age in primary care settings. *Prerequisites: NSG 6612, 6613. Co-requisite: NSG 6665.*

NSG 6667 Primary Care II (3)
Focuses on advanced knowledge and theory base in the assessment and management of care of adult and geriatric patients. Health promotion is emphasized, but the practitioner is also prepared to deliver complex multifaceted care to clients in primary and rehabilitative settings. *Prerequisites for MSN students: NSG 6604, 6660, 6665, 6666, 6691, 6692. Co-requisites: NSG 6668. Prerequisites for DNP students: NSG 6604, 6665, 6666, 6691. Co-requisites: NSG 6668.*

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 patients in the primary and rehabilitative care settings. *Prerequisites: NSG 6665, 6666. Co-requisite: NSG 6667.*

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. *Prerequisites: All core nursing specialty courses. MSN students only: Co-requisite: NSG 6680.*

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

NSG 6680 Family Nurse Practitioner Internship (5/20)
Internship course designed to provide extensive clinical experience with a broad spectrum of patients to allow students opportunities to strengthen clinical skills in specific areas. *Prerequisites: All core and FNP nursing specialty courses. Co-requisite: MSN students only: NSG 6670.*

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 and evidence-based practice relevant to advanced nursing. *A grade of "B" or better is required.*

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

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

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 or evidence-based practice. Students must take this course during their final Fall semester. *Grading system is Pass/Fail. Prerequisites: NSG 6604, 6660, 6691, 6692.*

NSG 6697 Scholarly Inquiry Practicum II (1/2)
Faculty-guided experience for implementation and evaluation of student's scholarly inquiry. *Grading system is Pass / Fail. Prerequisite: NSG 6696. Successful completion of this course meets the MSN comprehensive exam requirement.*

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.

DOCTOR OF NURSING PRACTICE

NSG 8801 Healthcare Informatics and Data Management (3)
Provides an overview of the planning, implementation, and evaluation of clinical information systems. Assists student in recognizing the applications of nursing informatics in healthcare systems. Includes a historical review of the evolution of nursing informatics and current trends. Prepares student with knowledge and skills necessary to retrieve, manage, and generate data relevant to evidence-based practice. *Prerequisite: NSG 6655 or admission as post –MSN.*

NSG 8802 Applied Biostatistics (3)
Builds on prior knowledge of basic statistical concepts, including descriptive statistics and the components of statistical inference (p-values and hypothesis testing). Emphasizes ethically generated application and results rather than clinical theory. Focuses on application of statistical methods that evaluate evidence-based nursing practice including inferential statistics (*t*-test, ANOVA, risk index, linear and multiple regression, and other multivariate tests). Requires writing narrative and tabular results using APA format.

NSG 8804 Policy and Politics in Healthcare (3)
Addresses healthcare policies and political forces that shape them. Analyzes the adequacy and impact of current legislation; federal, state, local and workplace policies; and best practice guidelines for patient-centered care, and advanced practice roles. Emphasizes the leadership role of the DNP in areas of analyzing, formulating and implementing healthcare policies. Explores the interrelationships between policies and nursing, organizations, politics, and the economics of healthcare. *Prerequisites: NSG 8815, NSG 8820*

NSG 8805 Principles of Epidemiology (3)
Presents concepts, principles, and methods of the epidemiological approach to disease and intervention, identification of cause of disease, response to disease outbreak, disease surveillance, evaluation of screening and prevention measures, and ethical issues in epidemiological research. Applies biostatistical concepts necessary to interpret findings of epidemiological studies and to critically evaluate application to evidence-based practice. Examines distribution and determinants of disease risk in human populations across the lifespan with an emphasis on disease prevention and early detection.

NSG 8810 Synthesis of Evidence Based Practice I: Project Identification (1)
Orients and introduces the DNP Synthesis Project which focuses on the identification and initial development of the DNP Synthesis Project for improvement of nursing practice or patient outcomes within a specialized area of advanced practice. Requires the identification of feasible DNP Synthesis Project idea, synthesis of evidence-based literature, selection of a DNP Synthesis Project Chair and committee and initiation of an e-portfolio. Requires completion of a minimum of 60 clinical hours for the development of DNP role competencies. *Co-requisite: NSG 8812.*

NSG 8812 Foundations of Evidence-Based Practice (3)
Explores issues related to evidence-based practice. Emphasizes the process of evaluating evidence for best practices within healthcare delivery systems. Equips the advanced practice nurse with the skills needed to identify, critically appraise, and utilize best evidence to recognize and comprehend concurrent needs and demands of patients, communities, and organizations and direct appropriate interventions for the improvement of outcomes. *Co-requisite: NSG 8810.*

NSG 8815 Evaluation Methods for Improvement of Clinical Outcomes (3)
Appraises the methods of evaluation of clinical and program outcomes as they guide safe and effective patient and aggregate health care. Focuses on application of evidence-based models and middle range nursing theories to methodologies and evaluation methods; measurement of study variables related to evidence based practice; and nurse-sensitive outcomes. Synthesizes clinical, patient, aggregate and economic outcomes. Contributes to the development of DNP Synthesis Project methods and outcomes. *Prerequisites: NSG 8801, NSG 8802, NSG 8812. Co-requisites: NSG 8820.*

NSG 8820 Synthesis of Evidence Based Practice II: Project Development (2)
Develops the methodology for an evidence-based DNP Synthesis Project with a systems-level impact for the improvement of nursing practice or patient outcomes within a specialized area of advanced practice. Explores the impact of ethical, safe and effective patient and organizational outcomes in the translation of evidence into practice. Culminates in the defense of the DNP Synthesis Project proposal, compliance with the regulations involving human subjects and approval from Troy University's Insti-

tutional Review Board. Requires completion of a minimum of 120 clinical hours for the development of DNP role competencies. *Pre-requisite: NSG 8810. Co-requisite: NSG 8815*

NSG 8822 Leadership in Organizations and Systems (2)
Prepares students to lead and manage the challenges of a global, dynamic, and changing healthcare environment. Analyzes and evaluates nursing leadership and evidence-based management theories critical to leading in today's healthcare systems. Focuses on integration and application of concepts of leadership, management, business planning, and evaluation of population-based efforts to provide affordable quality care. Prepares the student to utilize these concepts in articulating a vision encompassing evidence -based care.

NSG 8824 Bioethical Issues In Healthcare (2)
Focuses on the consistent themes in both bioethics and the laws related to bioethics. Includes: issues in morality, types of ethical theory, individual rights (freedoms), informed consent, patient-professional relations, right to privacy, professional ideals, and the four ethical principles of autonomy, non-maleficence, beneficence, and justice. Analyzes the leadership role of the DNP in the areas of preventative ethics and utilization of decision models for resolving ethical conflicts are analyzed.

NSG 8826 Diversity and Social Issues in Health Care Systems (2)
Explores health disparity and diversity as a result of economics, class structures, cultural background and social stigmas. Critically analyzes the impact of local, national, and international social issues on health care delivery. Examines prominent social issues for the development of appropriate clinical guidelines and policy for patients, groups, and organizations. Analyzes healthcare models for accuracy and appropriateness based on evidence of cultural health seeking behaviors of groups.

NSG 8830 Synthesis of Evidence Based Practice III: Project Implementation (2-4)
Focuses on implementation of an evidence-based DNP Synthesis Project with a systems-level impact for the improvement of nursing practice or patient outcomes within a specialized area of advanced practice. Requires integration of knowledge of nursing theory, evidence-based nursing practice, physiologic and pathophysiologic foundations, ethical and legal principles and healthcare systems. Involves development of datasets for analysis of DNP Synthesis Project outcomes. Requires completion of a minimum of 120 clinical hours and up to 240 clinical hours. *Prerequisite: NSG 8820.*

NSG 8840 Synthesis of Evidence Based Practice IV: Project Evaluation (3-5)
Emphasizes the evaluation, synthesis and critique of DNP Synthesis Project outcomes to support quality clinical or organizational practices. Requires completion of a final paper to the DNP Advisory Committee and presentation to faculty and peers. Concludes with reflection and evaluation of achievement of DNP role competencies. Requires completion of a minimum of 180 clinical hours and up to 240 clinical hours. *Prerequisite: NSG 8830.*

NSG 8850 Dissemination (3)
Emphasizes preparation and submission of a manuscript to a professional peer-reviewed journal for dissemination of the DNP Synthesis Project. Includes selection of best fit journals and conferences, review of manuscript submission process, and techniques (guidelines) for scholarly writing. Examines ethical issues related to publication and dissemination. *Co-requisite: NSG 8840.*

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

PA 6604 Workforce Planning and Staffing (3)
A study of theory, principles, and legal requirements for effective workforce planning, recruitment, selection, and employment in public and non-profit organizational settings. The course provides an in-depth analysis of tools, techniques and statistical concepts applied to the fundamental HR function of workforce planning and staffing. *Prerequisite: PA 6624.*

PA 6605 Training and Development (3)
A study of concepts and practices critical to identifying human resources training and development needs critical to ensuring organizational effectiveness.

PA 6606 Issues in Managing the Public Workforce (3)
A study of concepts and practices to introduce the student to public sector employee performance management requirements, sound employee/labor relations practices, how compensation is determined and the various pay systems and benefits, special monetary incentives, and tangible and intangible awards to motivate, retain, and recognize employee performance of today's multi-generational workforce.

PA 6607 Performance Measurement and Management for Public and Non-profit Organizations (3)
This course focuses on how performance measurements are becoming increasingly important in public and non-profit settings. It will ground students in the fundamentals of performance measurement-systems and demonstrate how they are critical from a mission, strategic, funding, transparency and accountability perspective. It will cover not only how to select appropriate measures, but also how to implement a performance measurement system and use

performance measures in managing an organization. In addition, the course will highlight the need for leadership and management acumen to ensure success in achieving meaningful, significant and lasting results.

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 organizations.

PA 6622 Public Policy (3)
An overview 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, functions, and constitutional issues involved with managing public employees. Specific functions addressed include planning, job analysis, position classification, recruitment and selection, staffing, performance management and appraisal, labor-management relations, training, and other personnel functions.

PA 6625 Specialized Study in Public Administration (3)
A 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 Director of *the MPA Program must approve the topic. PA 6625 may substitute for a required concentration course only once in a student's program and only if taken for three credit hours.*

PA 6630 Strategic Planning (3)
A 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, program outcomes, and impact evaluation(s). *Prerequisite: PA 6601.*

PA 6640 Intergovernmental Relations (3)
An examination of the administrative, fiscal, and legal issues that govern relations among the various governmental entities in the United States.

PA 6643 Advanced Public Human Resource Management (3)
This course is designed to help the student understand the law as it applies to the management of human resources. Its coverage is aimed at preparing the managers of human resources to recognize legal problems, to know the legal impact of decisions of personnel matters and to be knowledgeable in general of the law as it might impact individuals in organizations. *Prerequisite: PA 6624*.

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)
A study of the various theoretical perspectives that help to explain complex organizational behavior in public and nonprofit organizations in the global environment.

PA 6647 Advanced Contract Administration (3)
An examination of the current processes, procedures, standards, issues and problems in planning, managing, auditing, and evaluating contract performance. *Prerequisite: PA 6645* .

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 & 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)
A study of problem(s) in a public or non-profit organization using analytical methods with a public

policy focus and producing a scholarly paper that contributes directly to the student's curriculum. *The Director of the MPA Program must approve the topic. PA 6660 may substitute for a concentration course only once in a student's program and only if taken for three credit hours.*

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)
An examination of the 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 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 6675 Public Health Services Administration and Policy (3)
The course provides a framework for developing and analyzing a range of U.S. public health policy areas and issues; acquaints students with increased understanding of the context of public health administration and healthcare policy; and examines key factors and forces impacting total public health system performances in the United States.

PA 6676 Legal and Social Issues in Public Health Administration (3)
An examination of the legal and ethical aspects of contemporary legal and social issues within the public health services administration process.

PA 6677 Public Health Preparedness & Emergency Response (3)
The course provides an overview of public health's involvement and response strategies to various natural and unnatural emergencies and the domestic and international responses to disasters, outbreaks, and epidemics.

PA 6678 Introduction to Public Health (3)
An introduction to the mission, roles, issues, and context of public health, community health, and health systems, including the history and mission of public health as well as a comprehensive exploration of the essential services and core functions of public health, social justice, and human rights.

PA 6679 E-Governance (3)
The course studies concepts and methods of e-Government strategies to include planning, implementing, and evaluating information technology used to deliver government services. Topics include e-Government strategy, the use of Web 3.0 and social media, policy concerns, and how to assess the performance and function of e-Government applications and strategies.

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.

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. *To enroll in PA 6699, students must have a 3.0 grade point average or better and take PA 6699 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 "B" or better. Students should retain core course textbooks for use in PA 6699.*

NOTE: Courses from disciplines other than Public Administration (CJ and IR) used as PA concentration selections are described in the Catalog 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 5511 Advanced Modern Physics (3)
Foundations of statistical physics, solid state physics, nuclear physics, elementary particles, astrophysics, and cosmology. *Prerequisite: 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 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 Specialized Study in Area of Physics (1-3)
6626 A study of a problem or problems using research
6627 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.*

POST SECONDARY EDUCATION

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 ides 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 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. *Grading system is Pass/Fail.*

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.

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 6610 Physiological Dynamics of Alcohol & 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 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 6620 Introduction to Play Therapy (3)
This course is designed to promote the development of a historical, theoretical and ethical basis for the practice of play therapy. This course must be taught by a registered play therapist.

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

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. *Prerequisite: CP/EDU 6691 (with a grade of B or better), 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. *Grading system is Pass/Fail.*

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. *Grading system is Pass/Fail. 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 application of a multiaxial 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. *A grade of "B" or better is required. 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 Specialized Study in Psychology (1-6)
7726
7727
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 Thesis (3)
7795 Independent research for and preparation of a school arly 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. *Grading system is Pass/Fail.*

QUANTITATIVE METHODS

QM 6640 Data Analysis for Global Managers (3)
This applied course provides the skills managers need to analyze data quantitatively and to make decisions using spreadsheet modeling tools. As a basic understanding of statistical concepts is assumed, the focus will be on the application of these concepts. Topics covered include probability distributions, statistical inference, regression analysis, time series analysis and forecasting, quality management, and an introduction to simulation. *Prerequisites: Graduate standing, admission into the MBA program and all undergraduate business prerequisite courses or equivalent completed.*

QM 6641 Management Science (3)
An analysis of the probabilistic and deterministic quantitative techniques available to business managers involved in the decision- making process of the marketplace. Included is an evaluation of the models and processes now available for problem-solving purposes. *Prerequisite: QM 6640*

QM 6655 Introduction to Project Management (3)
This course provides an introduction to effective project management theory, tools, and techniques used throughout the entire project sequence, from pre-project definition through post-project evaluation.

QM 6660 Seminar in Project Management (3)
An application of project management theories and practice in the workplace.

QM 6665 Advanced Project Management (3)
This course provides an extension of QM 6655. Varied project approaches in different types of organizations are examined. The extensive use of project management software will enhance the student's knowledge of project management and his or her value to the organization.

READING

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 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 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 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. *Prerequisites: 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 Specialized Study in Area of Science (1-4)
6626
6627
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.

SECOND LANGUAGE INSTRUCTION

SL 6610 Survey of SLA for SL Teachers (3)
This course will look at recent research and publications relative to second language teaching. 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, electing appropriate method and employing materials, and evaluation in second language teaching.

SL 6615 Intro to Linguistics (3)
The purpose of this course is to provide students with a foundational understanding of the complex multifaceted system that we call language. Through lectures, discussions, and problem solving, students will develop an understanding of the various components that constitute language acquisition and to describe the interlanguage of language learners. In the first mid-term, the areas of psycholinguistics, sociolinguistics and animal communication as they relate to second-language learning will be explored.

SL 6620 Survey of Sociolinguistics for Second Language Teachers (3)
Sociolinguistics is the study of the systematic relations of language varieties and social groups. A wide variety of phenomena are investigated in sociolinguistics, including social, regional and stylistic variation, pidgins and creoles, multilingualism, age and gender differences, relationship between language and culture, etc. The goal of the course will be to gain understanding and an awareness of the socio-cultural factors that influence the way people use different language varieties to communicate with each other.

SL 6630 Principles, Techniques & Materials in SL Teaching (3)
This course overviews the teaching principles, techniques and materials relevant to an interactive approach to second language teachers. Students will expand their teaching repertoire by studying curriculum design, assessment measures, learner variables, techniques and materials for teaching grammar/vocabulary/four skills (listening, speaking, reading and writing) and sociopolitical contexts for teaching ESL/EFL. Prerequisite(s): SL 6035 Methods and Approaches to Second Language Teaching.

SL 6635 Methods & Approaches in SL Teaching (3)
This course will look at recent research and publications relative to SECOND LANGUAGE TEACHING. 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 language teaching.

SL 6640 Teaching Language Skills (3)
The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding of language and develop techniques to teach a new language and its background culture connected to the language. This class will help participants to develop instructional strategies and practical tools for integrating culture into a language acquisition classroom.

SL 6645 Grammar (3)
The purpose of this course is to assist graduate students as they investigate and construct a deeper understanding of and develop techniques to teach a new language and its grammar connected to the language. This class will help participants to develop instructional strategies and practical tools for integrating grammatical instruction into a language acquisition classroom.

SL 6653 Assessment & Evaluation (3)
The purpose of this course is to provide students with an overview of the skills, techniques and information necessary to become competent in the process of second language assessment and research. Students will be required to learn and practice various forms of assessment and research. The learning structure of this course will consist of interactive instructor presentations, learning activities, group discussions, independent readings and practice of assessments and research procedures.

SL 6691 Research Methodology (3)
This course will examine issues and recent research on second language acquisition (SLA). 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 (APS) is required. This research course may not be substituted with another research course or one transferred from another university. A grade of "B" or better is required).

SL 6695 Thesis (1-3)
The thesis must be related to a Second Language Instruction problem or situation. Information regarding the thesis program may be obtained from the Dean of the Graduate School. This course may be repeated. Grading system is Pass/Fail. *Prerequisite(s): All 9 of the Core Courses must be completed.*

SL 6696 Practicum (3)
Supervised experiences related to instruction in area of specialization. The application of skills, concepts and principles acquired in previous courses will be emphasized as well as all the principles of the SIOP Model. *Prerequisite(s): All 9 of the Core Courses must be completed.*

SL 6699 Capstone (1-3)
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 situations and future plans. The determination of the content for each student will be made through collaboration between the student, the student's advisor and the instructor of the course. Students may focus on supervised teaching, action research or a project with a major field agency. *Prerequisite(s): All 9 of the Core Courses must be completed.*

SOCIOLOGY

SOC 5506 Urban Society (3)
Historical, physical, economic, and social evolutions of urbanized areas. There is an emphasis on contemporary urban problems with implications for policy and planning.

SOC 5515 Sociology of Gender (3)
Provides an analysis of the conceptualization of gender, reinforced with a focus on the methods of studying gender, historical perspectives on gender, biological and social bases of gender, and how gender intersects with other stratification systems within societies. Using a multicultural perspective, special emphasis is placed on how gender is manifested in the family, work as well as other major social institutions.

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 sociological theory.

SOC 5530 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.

SOC 5546 Deviant Behavior (3)
This course will explore the social meaning and construction of social behavior outside normative boundaries. Deviance is relative social behavior that occurs outside social norms. By the end of this course, students will be familiar with, and think critically about the attitudes, behaviors, and meanings associated with society and social deviance. In addition, students will be introduced to topics related to law, social change, social power, conflict, structure, and culture.

SOC 5550 Peace, Conflict, and Human Rights (3)
Sociological analysis of peace, conflict and human rights, with a focus on the last 100 years. Emphasis on non-violent struggles at the nation-state level internationally. The role of ethnic and religious affiliations in current war and conflict at home and abroad will also be examined.

SOC 5555 Death and Dying (3)
This course provides an examination of individual and societal attitudes toward death and the dying process. It will include the emotions experienced, cultural variations, theoretical perspective and institutional relationships.

SOC 5556 Gerontology (3)
Multidisciplinary overview of characteristics, strengths, and problems of older persons; diversity in aging process involving gender, race, ethnicity, subculture; services to older adults; gerontology as an academic discipline and a field of practice.

SOC 5560 Sociology of Health, Medicine and Illness (3)
The sociological perspective applied to medicine. Topics include changing ideas of disease causation, the role of practitioners and patients, the institutional setting, differential delivery of health services, differential patterns of morbidity and mortality and the politics of health.

SOC 5570 Selected Topics in Social Problems (3)
This course will focus on selected social problems in today's society. Topics may include problems in social institutions, global issues, social conflicts, gender/racial/ethnic inequality, deviance and social change.

SOC 6625 Specialized Study in Area of Sociology (3)
6626
6627
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.*

SOC 6630 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. *Prerequisite: SOC 3350.*

SOC 6631 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.

SOC 6650 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.

SOCIAL SCIENCE

SS 5550 Peace, Conflict and Human Rights (3)
Sociological analysis of peace, conflict and human rights, with focus on the last 100 years. Emphasis on non0violent struggles at the nation-state level internationally, the role of ethnic and religious affiliations in current war and conflict at home and abroad will also be examined.

SS 6610 Grant Writing in the Social Sciences (3)
In the non-profit world as well as in social science research, grant writing is a valuable skill to acquire. This course will explain how to research potential funding sources not only in the social sciences but also in the social service sector. It will also provide hands-on experience in writing well-crafted proposals.

SS 6630 Quantitative Analysis in the Social Sciences (3)
This course is designed to teach what social scientists do with the data they gather. Particular attention is given to descriptive and inferential statistics, the relationship between research and policy, evaluation research and research ethics. Special emphasis is given to utilization of SPSS.

SS 6690 Seminar in Social Sciences (3)
This course will focus on current issues in the Social Sciences and prepare the student for transition into a Social Science career or further graduate study at the doctoral level.

SS 6691 Survey of Research Methods in the Social Sciences (3)
A survey of the methods used in the Social Sciences to collect, analyze, and report data.

SS 6693 Thesis Practicum (3)
During this course, the student, under the supervision of the instructor, will design and implement a plan to collect and analyze data in preparation for the completing of the thesis.

SS 6695 Thesis (3)
During this cours3e, the student, under the supervision of the instructor, will use data collected during SS 6693 Thesis Practicum to write a thesis as partial fulfillment of the requirements for the Master's degree.

SS 6698 Social Theory (3)
A survey of theoretical approaches used historically and currently in the Social Sciences.

SOCIAL WORK

SWK 6601 Social Welfare Policy and the Social Work Profession (3)
This course is designed to assist students in developing a working understanding of American social policy, and the social welfare system, its response to human need and its relation to the organized profession of social work. Emphasis is placed on identifying and examining social, political, economic, legal and cultural concepts that influence policy formation, program development and service delivery.

SWK 6604 Human Behavior In The Social Environment I (3)
The overall purpose and primary focus of this course is the exposure to and acquisition of knowledge about the development of human behavior within the social systems of individuals, families, groups, communities, institutions, and organizations. This course will provide through a series of lectures, participatory discussions and in-class activities, a framework with which to gain a professional understanding of human behavior from an ecological systems perspective.

SWK 6605 Human Behavior in the Social Environment II (3)
The overall purpose and primary focus of this course is the exposure to and acquisition of knowledge about the development of human behavior within the social systems of individuals, families, groups, communities, institutions, and organizations as this relates to the adult to elderly aspects of the life span. This course will provide through a series of lectures, participatory discussions and in-class activities, a framework with which to gain a professional understanding of human behavior from an ecological systems perspective.

SWK 6606 Direct Practice Methods with Individuals and-Families (3)
This course focuses on direct social work practice with individuals and families based on an ecological multilevel systems framework and a strengths perspective. Knowledge, skills and values essential to the professional relationships (including mutuality, collaboration and respect for the client system) are developed. Knowledge, skills and values essential to implementation of a variety of social work roles are acquired through examination and analysis of appropriate practice models through experiential classroom activities and critiques of case studies.

SWK 6608 Theory and Practice with Groups (3)
This course is an introduction to theory and practice with diverse groups to assist students in developing a contextual understanding of group dynamics over the course of the group process. Viewed through the lens

of race, culture, and gender, this course will emphasize group functioning within a strengths- based, resiliency framework.

SWK 6612 Theory and Practice with Communities Organizations (3)

Explores social work interventions at the community level, including organization, planning, and development. Discusses strategies for mobilizing community members, using community organizations, formulating coalitions, engaging in participatory planning, and social and economic development.

SWK 6614 Cultural Diversity (3)

The purpose of this course is to provide students with an opportunity to examine and integrate current trends, issues, and dynamics as they relate to professional social work practice with diverse individuals, families, groups, and communities. The effects of race, class, ethnicity, age, disability, and sexual orientation are examined as related to interpersonal, inter-group, inter-group, and inter-system power struggles and differences.

SWK 6620 Social Work Practice with Women (3)

This course is designed to facilitate an understanding and appreciation of diversity among women utilizing multiple practice perspectives (including feminist theories). In addition, it is designed to foster a critical understanding of the dynamics and consequences of social and economic injustices, inclusive of but not limited to discrimination and oppression in formulating our assessment and treatment plans with women and the critically assessment and challenge of policies that negatively impact women.

SWK 6622 Crisis Intervention (3)

Direct Practice techniques for dealing with crisis. Crisis theory, stress management and time-limited intervention will be examined.

SWK 6691 Foundation Research Methods (3)

Basic principles of developing, testing, refining, and using scientific knowledge for social work practice are presented. Consideration is given to the development of theory, formulation of testable problem statements, the design of appropriate strategies for obtaining and analyzing relevant information, drawing conclusions and applications for use in professional practice, and communication of findings to others. *Prerequisites: Undergraduate or higher course in statistics*

SWK 6696 Foundation Practicum and Seminar I (2)

The Foundation Field Practicum and Seminar engages the student in an assigned human service agency. In addition to providing an orientation to the practicum experience, this course directs the student's study of the practicum client population and agency, promotes the student's self-assessment and learning goals for professional social work development. This course is the first 134 contact hours at an agency; a second course (SWK 6697, 134 contact hours); and a third course (SWK 6698, 134 contact hours) will complete a total of 402 contact hours at the same agency. *Prerequisites: Approved by Director of Field Education*

SWK 6697 Foundation Practicum and Seminar II (2)

The Foundation Field Practicum and Seminar engages the student in an assigned human service agency. In addition to providing an orientation to the practicum experience, this course directs the student's study of the practicum client population and agency, promotes the student's self-assessment and learning goals for professional social work development. This course is the second 134 contact hours at the same agency. There will be a third course (SWK 6698, 134 contact hours) completing the Foundation Practicum requirements of 402 contact hours. *Prerequisites: Approved by Director of Field Education*

SWK 6698 Foundation Practicum and Seminar III (2)

The Foundation Field Practicum and Seminar engages the student in an assigned human service agency. In addition to providing an orientation to the practicum experience, this course directs the student's study of the practicum client population and agency, promotes the student's self-assessment and learning goals for professional social work development. This course is the third and final 134 contact hours at the same agency, completing the Foundation Practicum requirements of 402 contact hours. *Prerequisites: Approved by Director of Field Education*

SWK 7701 Advanced Social Work Practice with Individuals and Families (3)

Advanced practice with individuals within family systems and community environments are addressed. The course builds from the knowledge acquired in SWK 6604 and SWK 6606 by expanding the conceptual dynamics of the ecological perspective related to individuals. Topics will include assessing individuals within a family and community context using multiple theoretical orientations.

Prerequisites: SWK 6604 and SWK 6606

SWK 7703 Direct Practice Evaluation (3)

This course is the second research course in the graduate social work curriculum. Building upon the principles of social science research methods acquired in SWK 6691, the content of this course focuses upon the linkages between family centered social work practice and social research. *Prerequisites: SWK 6691*

SWK 7705 Assessment and Psychopathology (3)

This course provides an overview of social work assessment methods applicable to family-centered clinical practice. Topics include the basic principles of social work assessment (including reliability and va-

lidity) and a review of common methods of empirically supported assessment methods.

SWK 7707 Advanced Social Work Practice with Groups (3)

This advanced clinical practice course teaches group practice skill development for use as a primary treatment modality in clinical social work practice. Theoretical and practice principles of group work are emphasized to enhance understanding and use of "group" as a complex system of roles and interrelationships in a highly experiential format. *Prerequisites: Complete Foundation course work*

SWK 7720 Special Topics (Social Work with Abusing and Neglecting Families) (3)

This course is a critical examination of current knowledge about the causality and interventions to prevent or remedy child abuse and neglect (more recently referred to as child maltreatment). Attention is given to ethical and cultural issues in defining and intervening with abusive and neglectful families. Legal aspects and implications for social policy and social work practice for prevention and remediation with families are emphasized. The course provides specialized content for graduate students interested in social work practice with families and children. It builds upon foundation content in social policy, social work theory and practice, and research provided during the first year of the graduate study in social work.

SWK 7722 Social Work in Health Care Settings (3)

This course enables students to explore and evaluate the issues involved in offering effective psychosocial interventions in a health care setting, understand managed care, compete within this environment, and influence the quality of health care. Emphasis on a holistic approach to health care will examine the biological, behavioral, cognitive, emotional, and spiritual components of the client within the health care system. The importance of these components as they interact with the individual's gender, ethnicity, and sexual orientation will also be explored. The complex but necessary interaction of the individual's experiences with family, social, political, and legal systems will also be examined. Finally, and with equal importance, the student's attitudes and feelings regarding the practice of social work in health care will be explored.

SWK 7724 Topics in Grant Writing and Program Development (3)

This course examines current issues, major concepts, and principles in grant writing (primarily) and program development (secondarily). Specific content is focused on development of proposals for human service agencies and related programs. The components of a human service proposal are examined including: needs assessment, objectives, program designs and models, evaluation designs, budgeting, and future funding.

SWK 7726 Social Work with Military Families (3)

The course is designed as an elective for graduate students in the School of Social Work who wish to increase knowledge and skills for practice with military personnel, Veterans, and their families. Students will learn about the rold of social work within the military and the Department of Veterans Affairs in meeting the needs of active duty service members, National Guard and Reserve members, Veterans and their families. Students will develop a working understanding of the history of military social work, aspects of the military culture that they will need to know in order to be able to develop a strong therapeutic alliance, social and mental health needs and issues facing this ethnically and culturally diverse population, military social work policies and services, and needed advocacy efforts in that regard, evidence-based and other mental health interventions with emerging empirical support for this population, and other ethnic and cultural diversity issues in military social work.

SWK 7730 ORGM Evaluation (3)

This course is designed to teach the integration of systems of care practices with the essential tools of ongoing assessment and development. There is a direct linkage between SWK 7730 and SWK 7732 (Program Design and Development). The student will examine quantitative tools such as Logic Models, Tylerian model, and other utilitarian models in addition to qualitative tools such as action research, participants' model, and other pluralistic models.

SWK 7732 Program Design and Development (3)

The student learns current issues, theories, policies, and methods in the development and management of nonprofit organizations, with emphasis upon strategic planning; resource acquisition through marketing, fund-raising, and grants; financial and managerial accounting; and human resources development, including the board, staff, and volunteers. *Prerequisites: Graduate student, completion of core curriculum.*

SWK 7734 Advanced Policy Analysis (3)

This course is designed to provide students with the ability to analyze contemporary social welfare policy issues and programs and to understand the relationship between social policy theory and social work practice. The course focuses on historical, political, economic, and other social conditions that influence policy development in the United States and some other countries.

SWK 7736 Organizational Leadership and Management (3)

This course examines current issues, theories, policies, and methods in the development and management of organizations, with emphasis upon strategic planning; resource acquisition through marketing, fundraising, and grants; financial and managerial accounting; and human resources development, including the board, staff, and volunteers. *Prerequisites: Foundation Courses completed*

SWK 7738 Organizational Leadership and Management Sen-

ior Seminar (3)
This course is conceptualized as a mechanism for students to draw upon all previous courses in the MSW program and integrate and apply all that they have learned. The course is taken concurrently with the final block field placement. Students demonstrate mastery of the current issues, theories, policies, and methods in the development and management of organizations.

SWK 7769 Advanced Direct Practice Senior Seminar (3)
This course is conceptualized as a mechanism for students to draw upon all previous courses int eh MSW Program and integrate and apply all that they have learned. The course is taken concurrently with the final block field placement. Students demonstrate mastery of the theoretical and empirically-based knowledge from all components of the curriculum, and the ability to apply this knowledge in advanced social work practice with children, youth, and families.

SWK 7796 Concentration Practicum I (3)
Placement in a social service agency which provides the opportunity to practice and develop beginning professional social work skills under the joint supervision of a faculty and an agency supervisor. Includes a weekly seminar plus a minimum of 170 hours in a concentration agency setting. This is the first of three required practicum courses. *Prerequisites: Completion of all Foundation Courses. Must have approval of Director of Field Education.*

SWK 7797 Concentration Practicum II (3)
Placement in a social service agency which provides the opportunity to practice and develop beginning professional social work skills under the joint supervision of a faculty and an agency supervisor. Includes a weekly seminar plus a minimum of 170 hours in a concentration agency setting. This is the second of three required practicum courses. *Prerequisites: Completion of all Foundation Courses. Must have approval of Director of Field Education.*

SWK 7797 Concentration Practicum III (3)
Placement in a social service agency which provides the opportunity to practice and develop beginning professional social work skills under the joint supervision of a faculty and an agency supervisor. Includes a weekly seminar plus a minimum of 170 hours in a concentration agency setting. This is the third of three required practicum courses. *Prerequisites: Completion of all Foundation Courses. Must have approval of Director of Field Education.*

SPORT AND FITNESS MANAGEMENT

SFM 6600 Foundations of Sport & Fitness Management (3)
This course is designed to introduce graduate students to the field of sport management. Various topics related to sport management and related fields will be discussed. *Students must enroll in this course during their first semester of graduate school.*

SFM 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.

SFM 6604 Statistical Analysis and Interpretation (3)
This course requires students to utilize statistical fundamentals, analyses, and interpretation of statistics. Statistical information includes, but is not limited to, sampling, hypothesis testing, regression, frequency distributions, t-tests, parametric and non-parametric statistical techniques, multivariate data analysis (MANOVA), and others using SPSS and other statistical software.

SFM 6610 Physical Education, Sport and the Law (3)
The course is designed to provide students with an in -depth awareness and understanding of legal responsibilities of sport managers, coaches, and administrators. Emphasis will be placed upon critically analyzing the legal theories, structures, statutes, case law, and standards that apply to the sport industry and that impact sport organizations. Substantive legal areas include tort, constitutional, antitrust, intellectual property, agency, contract, and business law.

SFM 6614 Risk Management in Sport (3)
Sport organizations are required to ensure safety and, as a result, they may be held liable for injuries. While safety and risk management are not viewed as being overly complicated, the specific understanding of safety principles and risk management decisions that assist sport managers to provide reasonably safe environments may be more problematic. This class will examine various theories of risk management as managerial functions in modern sport organizations as applied, but not limited to negligence, premises liability, product liability, financial considerations, and harassment.

SFM 6615 Organizational Behavior & Leadership in Sport(3)
In this course students will study the basic concepts, theories and organization of administration including financial management as applied to sport, physical education, and recreation.

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.

SFM 6617 Research Methods I (3)
This course explores principles, methods, and strategies for planning, designing, evaluating, and applying research in sport and/or related fields. A grade of "B" or better is required. *Prerequisites: SFM 6600 Foundations of Sport and Fitness Management and a total of 18 hours of SFM courses.*

SFM 6618 Sport Economics (3)
This course assists students in understanding past and contemporary trends in economics and sport economics research. In addition, major economic concepts and frameworks related to and outside of sport are researched and discussed.

SFM 6620 Physical Fitness: A Critical Analysis (3)
This course is designed to prepare the student for the American college of Sports Medicine (ACSM) Health Fitness Specialist (HFS) certification. The course will examine the process of pre-participation health screening and risk stratification, administration, of physical fitness assessments and interpretation of results and the development of appropriate exercise prescriptions used in the evaluation and improvement of human fitness. *Prerequisite: SFM 6650*

SFM 6623 Biomechanics of Sport Techniques (3)
This course is designed to prepare the student for the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) certification. The course explores basic biomechanical concepts and their application in the analysis of sport technique for goal of improving athletic performance. *Prerequisite: SFM 6650*

SFM 6625 Specialized Study in SFM (1-3)
6626 Study of problem or problems using research
6627 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.*

SFM 6632 Critical Issues in Sport and Fitness Management (3)
This course focuses on the recognition, discussion, and systematic analysis of controversial issues and problems encountered in the conduct of professional activities in sport, fitness, health and physical education.

SFM 6633 Sport Consumer Behavior (3)
This course examines the sport consumer as a decision maker by reviewing their social, cultural, and psychological influences on purchasing decision-making processes. Also, this course allows for students to gain an in depth review of such influences emphasizing their implications for marketing strategies.

SFM 6639 Sport Communication (3)
Students in this course will explore and apply communication theories to the sport industry. Emphasis will be on the examination of public and media relations with a special focus on organizational communication to external and internal publics.

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 6641 Sport Facility and Event Management (3)
This course is designed to provide the student with information concerning the planning, design, organization, and administration of sport and recreational facilities, with an added emphasis on event management.

SFM 6642 Managing Sport and Physical Activity Organizations (3)
This course focuses on the conceptual analysis of management in sport. The field of sport management is described in terms of the services within the field, and management itself is viewed as the coordination of the processes of production and marketing of those services. Students will discuss and demonstrate knowledge in managerial functions of planning, organizing, leading and evaluating problems associated with the production and marketing of services within the field of sport management. *Prerequisite: SFM 6600*

SFM 6644 Human Resource Management in Sport and Physical Activity (3)
This course focuses on management of human resources within sport and physical activity organizations. The course will explore the organizational processes of job design, staffing, leadership, performance appraisal, and reward systems. Desired outcomes of job satisfaction are examined along with organizational commitment. *Prerequisite: SFM 6600*

SFM 6645 Revenue Generation in Sports (3)
This course will explore the contemporary trends in revenue generation of professional and amateur sport teams and programs. The course will analyze and produce skills essential to the revenue production and sales process commonly found in business and sport business.

SFM 6650 Sport Nutrition and Exercise Metabolism (3)
This course examines established dietary requirements of athletes relative to performance, training, and recovery. Emphasis will be placed on the use of peer reviewed literature to understand the importance of pre– and post-event nutrition, nutritional issues faced by athletes, and possible erogenic strategies, foods, and dietary supplements. Examination of metabolic pathways will allow advanced interpretation of the metabolism aof macronutrients during conditions of exercise and disordered metabolism. *Prerequisite: SFM 6670*

SFM 6670 Exercise Physiology (3)
This course examines acute and chronic physiological responses of the respiratory, cardiovascular, and musculoskeletal systems to the demands of exercise. Contributions made by aerobic and anaerobic metabolism to energy production will be examined. The contribution of various physiological variables will be investigated to facilitate an understanding of the physiological basis of human performance.

SFM 6671 Advanced Exercise Physiology (3)
This course will allow students to experience and explore advanced concepts, topics, and laboratory techniques related to exercise physiology. Material covered in this course will prepare students to interpret, conduct, and share advanced material with their peers. Students will have the opportunity to implement an advanced research project or commence thesis-related research. *Prerequisite: SFM 6650*

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.

SFM 6673 Ethics in Sport (3)
The course examines ethical matters and issues relating to sport and physical activity.

SFM 6674 Entrepreneurship in Sport (3)
The course provides students with an awareness and understanding of basic concepts and problems in starting a business.

SFM 6675 NCAA Governance, Compliance and Institutional Control (3)
This course is designed to give graduate students an understanding of the history, purposes, fundamental policies, and administrative organization of the NCAA. The student will gain sufficient working knowledge of the Operating Bylaws of the NCAA Manual and learn to apply NCAA rules and regulations to compliance related scenarios. In addition the student will learn the basic principles of institutional control of an intercollegiate athletics program and the basic components and applications of an institutional compliance program.

SFM 6680 Practicum in Sport and Fitness Mgt. (1-9)
6681
6682
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 through group interactions. *Permission of the instructor is required.*

SFM 6690 Internship (3)
A 400-hour supervised experience in planning, staging and evaluating a formal practicum in related field. *Prerequisite: Permission of instructor.*

SFM 6691 Research Methods II (3)
This course examines the variety of research methods and reporting methods used in sport & fitness management research. A grade of "B" or better is required. *Prerequisite: SFM 6600, SFM 6604, and SFM 6617 with a "B" or better*

SFM 6694 Thesis I (3)
Independent research related to sport and fitness management topic under the supervision of the student's advisory committee. A thesis proposal must be approved by the student's advisory committee. Grading system is Pass/Fail.

SFM 6695 Thesis II (3)
Independent research leading to the preparation of a scholarly paper related to sport and fitness management topic under the supervision of the student's advisory committee. The student's advisory committee will administer an oral examination covering the research and findings. Grading system is Pass/Fail.

SFM 8801 Statistical Analysis and Interpretation (3)
This course examines the fundamentals, analyses, and interpretation of statistics. Statistical information to include sampling, hypothesis testing, regression, frequency distributions, t-tests, parametric/ nonparametric statistical techniques, multivariate data analysis (MANOVA), and others using SPSS and other statistical software.

SFM 8803 Research Methods for Doctoral Students (3)
The purpose of this course is to introduce the student to broad and practically oriented research design methods within sport management as a social science. This course will also require students to investigate the development and usage of theory and design as they relate to research in sport management. Using this knowledge, students will be able to begin developing their own research agenda by identifying and expanding key questions within there area of interest. A grade of "B" or better is required.

SFM 8805 Research Methods II (3)
This course examines the variety of research methods and reporting methods used in sport and fitness management research. A grade of "B" or better is required.

SFM 8807 Seminar in Research Dissemination (3)
This course is designed to prepare individuals for the research demands of higher education and the sport industry. Emphasis will be given to both scholarly and practical publication and presentation processes including but not limited to: researching appropriate publication and presentation outlets, adhering to publication/presentation requirements, submitting projects according to the respective guidelines, and preparing for oral and poster presentations.

SFM 8810 Seminar in Applied Statistics in Sport Manage ment (3)
This course provides an introduction to the statistical techniques commonly employed in sport management research. Course topics will include statistical techniques that measure the relationship among variables, determine significance of group differences, predict group membership, and analyze scale structure.

SFM 8812 Seminar in Sport Marketing (3)
This course will include discussions of current topics and issues impacting sport marketing and its application within the sport management field. Emphasis is on discussion and critical analysis in sport marketing theory, research, education, and current issues relative to social, cultural, political, and ethical issues in sport marketing.

SFM 8814 Seminar in Sport Finance (3)
This course is designed to provide students with an advanced appreciation and understanding of financial theories related to sport management. Emphasis is on review, research, discussion and application of financial cases.

SFM 8816 Seminar in Organizational Behavior and Leadership (3)
This course covers a wide spectrum of organizational behavior and leadership topics and focuses intently on the theoretical evolution and underpinnings of the material and how research could be potentially directed in the future. This course exposes the student to various leadership theories, management principles, and variables, including analysis of the methods and materials commonly utilized by organizational researchers.

SFM 8820 Seminar in Legal Aspects of Sport (3)
This course is designed to provide students with an advanced appreciation and understanding of legal responsibilities of sport managers. Emphasis will be on researching and reviewing legal cases and understanding and applying legal theories to select cases.

SFM 8822 Seminar in Sport Management Pedagogy (3)
This course examines common practice and issues in higher education and sport management pedagogy. Emphasis will be placed on understanding the varying types of institutions, traditional roles and responsibilities within the respective institutions, ethical issues in higher education, research and practice for effective college teaching, the classroom environment, effective instructional formats (online and traditional), and teaching strategies.

SFM 8824 Sociological Aspects of Sport (3)
This course focuses on the advanced recognition, discussion, and systematic review and analyses of sociological and ethical issues in sport. Topics discussed will include but are not limited to: the development of sport and the sports industry; the political and cultural significance of sport; the part played by sport in international relationships; the relationship between sport, gender, class and ethnicity; a range of sports-related issues such as health, drugs, and violence, and the management of sports activities both in educational establishments and in the wider society.

SFM 8825 Specialized Study in the Area of Sport Management (3-6)
This course is designed to provide the student with an opportunity to explore an area of interest related to his/her selected specialty under the direct supervision of a faculty member.

SFM 8830 Special Topics (3)
This course is designed to explore sport management related topics in depth to allow the graduate student to become an "expert" in that topic. Significant preparation, recognition of the topic, research, discussion, and collaboration with peers and colleagues will be required in order to adequately prepare for the submission of a scholarly research paper.

SFM 8860 Dissertation (1-9)
In consultation with the dissertation chair and committee, the student will design and conduct research to complete the aims identified in his/her research proposal, or as modified subsequently, in line with recommendations from the committee. Dissertation credit hours are offered in 3 hour increments. A student may not exceed 9 semester hours within a semester or six semester hours with a term.

SPECIAL EDUCATION

SPE 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. *Co-requisite: SPE 6654 or SPE 6655*

SPE 6609 Content Enhancement (3)
This methods course emphasizes inclusive teaching practices that combine an interactive instructional sequence with a teaching device for teachers of secondary level students (6-12) with mild disabilities. This course focuses on content enhancement routines that help teachers carefully organize and deliver content area information.

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. *A grade of "B" or better is required.*

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. *Prerequisite: SPE 3340 or SPE 6640 (or equivalent).*

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. *Prerequisite: SPE 3340 or SPE 6640 (or equivalent)*

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 6617 Adaptive Teaching Strategies for Students with Mild Disabilities –Grades 6-12 (3)
This course focuses on instructional approaches that emphasize teaching students effectively, regardless of disability or special need. Specifically this course provides strategies for adapting curriculum materials, teacher instruction, and student practice activities for both basic-skills and content area instruction. *Prerequisite: SPE 3340 or SPE 6640 or equivalent.*

SPE 6618 Adaptive Teaching Strategies for Students with Moderate/Severe Disabilities—Grades 6-12 (3)
A comprehensive study of research, theoretical issues, diagnosis, and educational planning for those students with moderate/severe disabilities. Curriculum adjustment and the development of differential instruction will be emphasized. *Prerequisite: SPE 3340 or SPE 6640 or equivalent.*

SPE 6620 Service Delivery Models for Multiple Disabilities (3)
The purpose of this course is to explore the many issues surrounding the education of secondary students with multiple disabilities. Special emphasis is placed on assessment, instructional models, transition programming, and data-based instructional decision making. *Prerequisite: 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*

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 6654 Collaborative 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 Profession-

al Internship Program provides the student with the opportunity to conduct classes and assume the role of a teacher while receiving supervision from a classroom teacher and a university supervisor for a period of one full semester. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience. *Co-requisite: SPE 5544*

SPE 6655 Collaborative 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. The student will demonstrate skills of the informed, reflective decision maker throughout the internship experience. *Co-requisite: SPE 5544*

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 6695 Collaborative Teacher 6-12 Practicum (3)
This course is designed to provide a supervised experience related to instruction in the area(s) of specialization 6-12. The application of skills, concepts, and principles acquired in previous coursework, as well as in 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 6698 Collaborative Teacher 6-12 Initial Practicum (3)
This course is for those candidates who do not currently hold an undergraduate teaching certificate for Collaborative Teacher, 6-12. This is a supervised experience in the 6-12 classroom with both the inclusion of disabled students into the general education classroom and with disabled students in a resource or self-contained setting. The prospective Collaborative Teacher will spend 100 clock hours in designing instructional 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. *Prerequisites: Completion of all core and teaching field areas for persons who do not currently hold an undergraduate teaching certificate in Collaborative Teacher, 6-12.*

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. *Prerequisites: 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. *Prerequisites: Completion of all core and teaching field courses for persons who do not currently hold an undergraduate teaching certificate in Collaborative Teacher, K-6.*

TAXATION

TAX 6684 Federal Tax Research (3)
A study of how to identify federal tax issues, locate the applicable tax authorities, evaluate the weight of the authorities, reach conclusions, and communicate the results of the research. *Prerequisites: Admission to the MBA, M.Acc or M.Tx program, including fulfillment of all business foundation courses and ACT 4494 and ACT 4495. A grade of "B" or better is required for M.Tx students.*

TAX 6685 Taxation of Individuals (3)
This course is an in-depth study of the federal taxation of individuals with heavy emphasis on property transactions. This course covers the major tax doctrines applicable to the taxation of individuals. This course addresses includible and excludible items of income and deductions allowed in calculating taxable income. The course requires the writing of a tax research paper, which would be suitable for submission to a high quality professional tax journal. *Prerequisite or co-requisite: TAX 6684*

TAX 6686 Estate and Gift Taxation (3)
This course covers the federal taxation of estates and gifts and provides an introduction to the federal income taxation of estates and trusts. This course will have a tax planning focus. *Prerequisite or Co-requisite: TAX 6684*

TAX 6687 Tax Practice and Procedure (3)
This course is a study of the Internal Revenue Service (IRS) tax assessment and collection process, including the examination of tax returns and the appeals process. The course covers the statutes of limitation on assessment, collection and refund claims. The course explains the legal and ethical requirements for practice before the IRS and the civil and criminal penalties that may be assessed. The course requires the preparation of a sample protest letter for a conference with the IRS Appeals Division. *Prerequisite or co-requisite: TAX 6684*

TAX 6688 Taxation of Corporations and Shareholders (3)
The course is a study of the federal taxation of corporations and shareholders. The course covers the tax aspects of forming a corporation, operating a corporation, distributions in respect of stock, redemptions of stock, and corporate liquidations. The course requires the writing of a tax research paper, which would be suitable for submission to a high quality professional tax journal. *Prerequisite or co-requisite: TAX 6684*

TAX 6689 Taxation of Partnerships and Partners (3)
The course is a study of the taxation of partnerships and partners. The course covers the tax aspects of acquiring a partnership interest, the partner's share of partnership income or loss, distributions of partnership assets and calculation of a partner's basis in the partnership. The course requires the writing of a tax research paper, which would be suitable for submission to a high quality professional tax journal. *Prerequisite or co-requisite: TAX 6684*

TAX 6690 State and Local Taxation (3)
The course is a study of state and local taxation. The course covers the tax aspects of state income tax, state and local sales and use tax, state franchise tax, and state gift and inheritance tax. *Prerequisite or co-requisite: TAX 6684*

TEACHER LEADER

TL 7700 Adult Learning Theories and Managing Change (3)
This course will focus on the examination of how adults learn in instructional settings and managing change. The adult learners' characteristics will be examined. Adult learning theory and current trends and advancements in adult learning and managing change will be examined. The focus will be on preparing the student to make better instructional decisions and use of resources in the education and training of adults.

TL 7702 Involving Parents and Community Stakeholders (3)
The focus of this course is on the successful school and what it must do to garner parental involvement and the community support that it needs. This course is a combination of the theory of community relations (why must communities support local schools to achieve their goals?) and a primer on how to develop the family and community partnerships which will help the school to achieve its goals.

TL 7717 Mentoring (3)
The purpose of this course is to prepare educational leaders to serve as role models and mentors for individuals. The educational leaders will develop methods, techniques and organize mentorship programs. Leaders will develop a knowledge base upon which to make informed reflective decisions about mentorship programs in diverse educational settings.

TL 7737 Curriculum (3)
This course examines the tenets of curriculum. This course peruses the current research that supports student learning and engagement. In order for instructional leaders to promote effective learning environments, they must be able to understand, identify and apply effective learning theories and methodologies.

TL 7740 Creating Effective Learning Environments (3)
Instructional leaders must work within the framework of the Individuals with Disabilities Education Act (IDEA) in order to effectively create, develop and maintain a highly efficient learning environment. This course will present best practices and the most up to date research related to the creation of effective learning environments within the public schools. The focus of the course will be both theoretical and practical in nature. As a result of the course, instructional leaders will be able to establish, develop, and maintain and evaluate instruction in order to build an effective learning environment.

TL 7747 Instructional Coaching (3)
This course focuses on (a) common forms of instructional coaching including literacy coaching, cognitive coaching, and content coaching and (b) the components/stages of instructional coaching.

TL 7757 Staff Development
Candidates consider and evaluate methods for promoting professional growth focusing on the improvement of teaching and learning. Various approaches to staff development and in-service education are examined in terms of their purposes and components.

TL 7767 Communication and Consultation Methods Practicum (3)
This course explores communication models and consultation methods as well as the implementation of those models to improve educational practices in the teacher leader. The course provides an opportunity for the teacher leader candidate to perform a variety of activities that a teacher leader must perform, under the supervision of a practicing teacher/ instructional leader. Focus is placed on strategies that will result in enhanced communication among all stakeholders, and increased student achievement.

TL 7792 Advanced Comprehensive Research Strategies (3)
This course is intended to explore the concepts of

quantitative and qualitative research methods application for research in education. Participants apply their skills in research design by completing a proposal for a substantive study related to the improvement of instructional services. *A grade of "B" or better is required.*

TL 7794 Research in Action (3)

The purpose of this course is to provide instructional leaders with a study of the processes involved in identifying, framing, evaluating, analyzing, and seeking information about problems faced by schools. The goal for the student is to propose a research and implement a study that examines a problem currently impacting the K-12 environment.