

**ACCT 2103 FUNDAMENTALS OF FINANCIAL ACCOUNTING** An introduction to financial accounting including developing, analyzing, and interpreting financial statements.

**ACCT 2203 FUNDAMENTALS OF MANAGERIAL ACCOUNTING** An introduction to management accounting and organizational performance measurements such as basic costing and capital budgeting. (Prerequisite: ACCT 2103)

**ACCT 3113 INTERMEDIATE ACCOUNTING I** Financial accounting theory and methodology including the conceptual framework of generally accepted accounting principles. Basic coverage of financial statement structure and detailed coverage of assets (Prerequisite: ACCT 2203)

**ACCT 3213 INTERMEDIATE ACCOUNTING II** Continuation of Intermediate Accounting II. Liabilities, equity, pensions, leases, revenue recognition, earnings per share, disclosure, and other select financial accounting theory and methodology topics. (Prerequisite: ACCT 3113 with a grade of C or better)

**ACCT 3313 INCOME TAX ACCOUNTING I** An introduction to basic income tax law and accounting requirements as they relate to individuals and sole proprietors. This would include income and deduction issues, filing requirements, and research. (Prerequisite: ACCT 2203)

**ACCT 3323 INCOME TAX ACCOUNTING II** A continuation in the study of income tax law with emphasis on business entities. The major topics consist of income tax requirements for corporations, partnerships, and limited liability companies. The course also covers tax research, and a basic introduction to unified estate and gift statutes. (Prerequisites: ACCT 3313 with a grade of C or better)

**ACCT 3343 COMPUTER-AIDED FRAUD EXAMINATION** The use of spreadsheets, databases and fraud analysis software IDEA to detect and analyze fraud using information generated by computerized accounting systems. This course will teach students the concepts of fraud examination, fraud detection and analysis using Excel, Access and IDEA software and interpret the findings from an auditor's view point. (Prerequisite: ACCT 2203)

**ACCT 3413 FORENSIC ACCOUNTING** Forensic accounting covers the basic concepts related to business and accounting financial fraud including its origin, prevention and detection. Investigative techniques are used to study financial statement misrepresentation, financial corruption, and asset misappropriation. Computer forensic methods are used to study the scope of these financial crime (Prerequisites: ACCT 2103 and ACCT 2203)

**ACCT 3513 COST ACCOUNTING** Cost management theory and practices: product costing, organizational planning and control, performance measurement, cost-volume-profit analysis, and managerial decision making. (Prerequisite: ACCT 2203)

**ACCT 3613 ADVANCED MANAGERIAL ACCOUNTING** Managerial cost control, capital budgeting, organizational performance, joint and process costing, cost analysis techniques, cost management practices. (Prerequisites: ACCT 3513 with a grade of C or better)

**ACCT 3713 GOVERNMENTAL ACCOUNTING** Accounting and financial reporting standards for governmental and not-for-profit organizations including fund accounting for state and local governments. (Prerequisite: ACCT 2203)

**ACCT 4113 ADVANCED ACCOUNTING** Consolidated statements, segments, interim reporting, bankruptcy and reorganization, translation of foreign currency. (Prerequisite: ACCT 3213 with a grade of C or better)

**ACCT 4223 FINANCIAL ANALYSIS AND CONTROL** This course examines the processes and methods of financial analysis and control. The course emphasizes the objectives of different users of financial statements and describes analytical tools and techniques to meet those objectives. Analytical methods range from the computation of ratio and cash flow measures to forecasting earnings for equity

valuation. Topics include cash flow analysis, profitability analysis, short-term and long-term forecasting analysis, credit analysis, and equity analysis and valuation. (Prerequisite: FIN 3113 with grade of C or better and ACCT 2203)

**ACCT 4243 ACCOUNTING RESEARCH** Research is an integral part of the financial, tax, and auditing fields of accounting. This course will introduce students to research methods and resources, including methods of communicating research findings. (Prerequisites: ACCT 2203 and junior standing)

**ACCT 4613 FORENSIC ACCOUNTING AND INTERNAL AUDITING** Two major issues for corporate accountants of their auditors are forensic accounting and internal auditing. This course provides a survey of the major subject matters to enhance the student's knowledge of the problems and practices used within corporations. (Prerequisites: Junior standing and ACCT 3113 with a grade of C or better)

**ACCT 4713 ACCOUNTING INFORMATION SYSTEMS** An introduction to AIS design methodology including accounting information flow, the transaction cycles, internal control, and auditing. The course focuses on automated information systems. (Prerequisite: ACCT 2203)

**ACCT 4813 AUDITING** Principles and procedures followed by a certified public accountant to render an opinion concerning fairness of audited financial statements. Corequisite or prerequisite:ACCT3213)

**ACCT 4913 ACCOUNTING THEORY** Theory of accounting, how it has developed, and relationship of accounting theory to accounting and business practice. (Prerequisite: ACCT 3213)

**ACCT 4950 ACCOUNTING INTERNSHIP** Supervised professional-level accounting assignment with a business firm, government agency, or non-profit organization. (Prerequisites: 30 hours in major including business core, permission of department)

**ACCT 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor.

**ACCT 4970 SPECIAL STUDIES** Individualized project selected in consultation with professor.

**ACCT 4980 SEMINAR** Small group study of topic announced by department.

**ACCT 4990 RESEARCH** Independent investigation designed in consultation with the professor.

**ACCT 5233 ACCOUNTING FOR MANAGERS** The primary emphasis of this course is on management's use of accounting information to manage the resources of a complex organization. The course focuses on three major areas: fundamentals of cost systems; managerial decision making; and managerial planning and performance evaluation.

**ACCT 5243 ACCOUNTING CONTROLS FOR MANAGERS** The chief executive office for any business has the ultimate responsibility for creating, maintaining and developing an effective and efficient system of internal control. This course is designed to give managers an "information edge" in their job and in meeting regulatory requirements such as the Sarbanes Oxley Act. Building on expertise in finance, strategy, operations, management, information technology, financial statement analysis and/or managerial accounting, this course should provide a manager with useful knowledge to establish or improve general and accounting procedures. The course will include the use of the case method and other learning techniques.

**ACCT 5253 AUDITING FOR MANAGERS** This course approaches auditing as a management decision-making process that affects the performance, quality, and legal compliance of the business being audited as a whole. It is designed to provide a framework for analyzing contemporary auditing and assurance issues in the new rapidly globalizing and changing knowledge economy.

**ACCT 5263 FORENSIC ACCOUNTING FOR MANAGERS** Using the case study approach, students will examine a variety of cases of corporate fraud involving asset misappropriation and corruption. Students

will also be required to prepare several cases involving corporate fraud. Students will be encouraged to be inquisitive and think creatively as they examine instances of fraudulent behavior which they may encounter in their professional careers.

**AP 1002 INTRODUCTION TO A&P TOOLS & EQUIPMENT** General purpose tool usage, basics of precision measurement; aircraft hardware and basic aircraft structures.

**AP 1032 PRINCIPLES OF A&P** Aircraft maintenance methods, federal aviation regulations and aircraft records.

**AP 1062 AIRCRAFT TECHNOLOGY AND SERVICING** Nomenclature of aircraft, servicing, towing, and mooring of aircraft.

**AP 1091 SHEET METAL & METAL FABRICATION** Aircraft welding, basic fabrication of steel structures. Airframe repair principles and selection of sheet metal fasteners and structural materials.

**AP 2112 POWERPLANT ELECTRICAL FUNDAMENTALS** Aircraft basic electrical systems, batteries, motors, generators and starters.

**AP 2121 AIRFRAME SERVICING & INSPECTION** Aircraft structures, wood and plastic construction and repair, finishing techniques using dopes, lacquers and epoxy materials.

**AP 2152 AIRFRAME & POWERPLANT SERVICING & INSPECTION** Preventative maintenance, 100 hour and annual inspection procedures.

**AP 2182 AIRCRAFT TECHNOLOGY** Aircraft control systems, aerodynamics, and aircraft drawing interpretation.

**AP 2192 AIRCRAFT HYDRAULIC SYSTEMS** Basic hydraulic principles, servicing, inspection and maintenance of hydraulic and pneumatic systems.

**AP 2212 AIRCRAFT ELECTRICAL SYSTEMS** Aircraft lighting systems, alternating current systems and power generation and distribution.

**AP 2241 POWERPLANT SYSTEMS** Aircraft lubrication systems, theory construction and maintenance of propellers, rotors, induction and exhaust systems.

**AP 2272 PHYSICS OF RECIPROCATING POWERPLANTS** Theory, construction and maintenance of aircraft reciprocating engines.

**AP 2302 PHYSICS OF GAS TURBINE POWERPLANTS** Inspection and maintenance of gas turbine engines and accessories.

**AP 2332 FLUID MECHANICS & FUEL SCHEDULING** Fuel injection systems, float and pressure carburetor operation and construction.

**AP 2362 APPLICATION OF ELEC & ELECTRONIC PRINCIPLES** High and low tension ignition systems, magneto, spark plugs, igniters, generator and starter overhaul and testing.

**AP 2393 MAINTENANCE SUPERVISOR** A study of FAA repair stations; PMA; STC, including aircraft, engine and supplies purchasing. (Prerequisite: Airframe and Powerplant Certificate or departmental approval)

**AP 2422 SPECIAL SLIDE RULE** Weight and balance theory and application, proper run-up procedures and ground handling techniques.

**AP 2453 INSPECTION AUTHORIZATION** Requirements for the inspection authorization, aircraft maintenance systems and inspection procedures. (Prerequisite: Airframe and Powerplant Certificate or departmental approval)

**AP 2514 TECHNICAL LAB PROBLEMS** Aircraft shop management, airport relations, employee training, self employment, aircraft sales and financing. (Prerequisite: departmental approval)

**AP 2980 SEMINAR** Topic as announced by department.

**ART 1003 # ART AND VISUAL COMMUNICATION** A variety of media, techniques, and processes are presented. These are presented in terms of the contribution they make in aesthetic expression. The study of significant people, movements and culturally related ideas is included.

**ART 1103 # ART APPRECIATION** The study of art from a variety of different backgrounds and cultures as both product and process. Aesthetic judgment making in evaluation of art from different times and places is stressed.

**ART 1200 ART EXPERIENCES** This zero credit hour, pass/fail course is designed to provide art and art program-related experiences to students in order to round out their art content courses with actual fine and graphic art experiences and to provide cultural opportunities for life-long learning. All art majors are required to enroll in this course every semester they are enrolled at Southeastern.

**ART 1213 DRAWING I** Perception of line, form and shape, and spatial relationships is developed through work in a variety of monochromatic media. Students will work with still life objects and the human figure with emphasis upon composition of the pictureplane, linear perspective and light effect on mass and space

**ART 1413 CERAMICS I** An introduction to clay utilizing basic materials and techniques used in handbuilding and on the potter's wheel.

**ART 2013 # 2-D DESIGN** Studio instruction in basic design through projects and exercises in fundamental form and space concepts. Control of proportion, scale, and design relationships; development of problem formulation and sound basis for value judgments. Release of student's potential creative capacities is the prime concern.

**ART 2023 # 3-D DESIGN** A study of basic elements and principles of 3-D design, theory, and their application to specific art problems.

**ART 2113 # ART HISTORY SURVEY I** A general survey of painting, sculpture, architecture, and minor arts from prehistoric times through the Renaissance, surveying Western Europe and American painting.

**ART 2333 VECTOR GRAPHICS I** A survey course designed to build a foundation in design theories and concepts to foster student creativity. The course will introduce tools in computer graphics, including software, production and reproduction technologies. Discussions will cover both creative and efficient application of digital tools and techniques. Students will complete project assignments utilizing a variety of computer graphic applications. (Prerequisite: ART 1213, ART 2013, CIS 1003 or BIM 1553)

**ART 2633 # WEB PAGE DESIGN I** An introduction to basic concepts to design a website including content, navigation, graphics, and overall design using current graphical interface software such as Frontpage, Flash, Dreamweaver. Attention will be given to good design elements and principles in laying out effective web pages. Students will be required to maintain a personal website.

**ART 2903 # DIGITAL IMAGING I** An introduction to the basic concepts and history of digital imagery and software programs such as Photo Shop that are used to manipulate digital images. Attention will be given to good design elements and principles for effective image development.

**ART 3013 # COMIC BOOK ART AND AMERICAN CULTURE** This course is a survey of the sequential art forms of the comic book and graphic novel as cultural artifact, aesthetic objects, and contemporary narrative. The course will survey the history of these art expressions and analyze how artists use formal style, narrative structure and audience demographics to create sequential art.

**ART 3033 GRAPHIC LAYOUT** Various aspects of graphic, commercial, and advertising concepts are examined in relation to design foundations presented in ART 1213, 2013, and 2023. Computer graphic application programs are utilized to create graphic designs incorporating lettering, digital imagery, and image manipulation. Outside lab hours are required to complete assigned projects (Prerequisites: Core and CIS 1003 and BIM 1553)

**ART 3083 # ISSUES IN AESTHETICS AND CRITICISM** This course addresses the issues of interpretation and evaluation in art by studying a variety of models of inquiry.

**ART 3103 # SURVEY OF NATIVE NORTH AMERICAN ART** This course surveys Native North American art from prehistoric artifacts to present day artworks. Major regional areas of study include the arts of the Eastern Woodlands, Great Plains, Northwest Coast, Southwest, and Mexico. Study focuses upon artworks within their historical and social context and the aesthetic, cultural, and symbolic meanings of traditional and contemporary North American Indian art.

**ART 3123 # COLOR THEORY** This class is an introduction to basic color theory, its historical background, and its application in two-dimensional design and painting. Students are required to complete studio assignments outside of class. (Prerequisites: ART 1213, ART 2013)

**ART 3133 # ART HISTORY SURVEY II** An examination of the art world from the end of the Renaissance to the present, emphasizing the intrinsic qualities of the work as well as the relationship of art to its cultural context

**ART 3203 # ART AND WORLD CULTURES** This is an introductory course designed to acquaint the student with the art and architecture of Asia, Africa, Oceania, Islam, and the Americas.

**ART 3213 DRAWING II** This course continues the development of a student's understanding of the concepts of drawing with attention given to demonstrating understanding of good composition. Emphasis will be given to use of colored media as students continue to develop skills from a variety of environmental subjects as well as the human figure (Prerequisite: ART 1213)

**ART 3223 PAINTING I** The design elements applied to painting with emphasis on color mixing, formal composition, and execution. Students will work with water-based media to explore the possibilities in painting with different mediums, techniques and styles including transparent watercolor painting (Prerequisite: ART 1213 and ART 2013 and ART 3123 with a grade of "C" or better)

**ART 3313 # HISTORY AND THEORY OF DESIGN** This course explores the historical and theoretical components of design from the Industrial Revolution to the present day. Products, furniture, textiles, packaging, advertising, typography graphics, communications, and industrial design will be studied in terms of their historical development and their translation and application within contemporary concepts of design in various professional fields.

**ART 3323 PAINTING II** A continuation of ART 3213, with emphasis on further refinement and elaboration of painting techniques and skills. (Prerequisite: all core courses)

**ART 3333 TYPOGRAPHY** This course explores the concepts, terminology, use and execution of typography within artworks and commercial design. Practice is guided with instruction in typographical design, history, and concepts through projects that exercise the fundamentals of typography and font design. (Prerequisite: ART 2903, ART 2333 with a grade of C or better)

**ART 3423 CERAMICS II** An expansion of ART 1413 with an emphasis on developing additional skills in ceramic design and construction using hand and/or potter's wheel. (Prerequisite: ART 1413)

**ART 3433 SCULPTURE I** Introduction to 3-D form in sculpture and to the two concepts of sculpture: free standing and sculpture-in-the-round. (Prerequisite: ART 2023)

**ART 3503 ART IN THE ELEMENTARY CLASSROOM** Presents teaching methods and procedures appropriate to the public elementary school. Course is designed to aid future teachers to teach art lessons with confidence and competence in a self-contained public classroom.

**ART 3523 CERAMICS III** A continuation of ART 3423 in developing a body of work and exploration of more advanced building and firing techniques. Students will present a proposal for an area of concentration and will learn how to and be responsible for firing various types of kilns. (Prerequisite: ART 3423)

**ART 3623 CERAMICS IV** A continuation of Ceramics III in developing a body of work and exploration of more advanced building and firing techniques. Students will present a proposal for an area of research and will research and develop glaze formulas as well as firing all kilns (Prerequisite: ART 3523)

**ART 3633 WEB PAGE DESIGN II** Continuation of Web Page Design I to create advanced professional web sites/pages using various graphics interface software and hardware. Students will maintain a multi-page website. (Prerequisite: ART 2633)

**ART 3814 # DIGITAL PHOTOGRAPHY I** This course will explore development of theories and history of photography as an art form that captures elements of human expression, history, and personal presence. Students will examine how photography has advanced to present-day digital cameras and how photographers manipulate light and composition to create photography as art. Digital camera with capability of manual settings required.

**ART 3903 DIGITAL IMAGING II** Digital Imaging II is a course designed to further explore methods and techniques used in creating and altering digital images. Instruction will be explored through projects and exercises using digital imaging equipment (camera) and digital editing software (Photoshop). This course will cover basic to advanced digital imaging editing skills helping you to create dynamic digital art for the web and print media.

**ART 4033 VECTOR GRAPHICS II** This course is a continuation of ART 2333 and will include the most important topics of vector graphics industry standard graphic software. Students will continue to expand knowledge of vector-based graphics preparation of digital artwork for pre-press and printing as well as Web-based design (Prerequisite: ART 2333 with a grade of C or better)

**ART 4133 # ART HISTORY III: MODERN AND CONTEMPORARY ART** This course is a survey of modern and postmodern art from the 1890s to the present, including important stylistic movements such as Cubism, Dada, Surrealism, Abstract Expressionism, Pop Art, and a number of postmodern approaches since 1960. The focus is on the ideas, works, and critical reception of specific artists, widened to include issues of race and gender and related developments in politics.

**ART 4203 DRAWING III** This course continues the development of students' understanding of the concepts of drawing. While attention is given to the utilization of the concepts of good composition, students will select, in consultation with the instructor, a particular subject matter area they wish to research and pursue. Students will choose suitable media in which to work. (Prerequisite: ART 1213 and 3213)

**ART 4213 PRINTMAKING I** A variety of printmaking techniques, such as serigraphy, woodcut, and intaglio are explored. (Prerequisite: core courses)

**ART 4223 PRINTMAKING II** A continued exploration into the printmaking medium, allowing individuals the opportunity to refine the techniques presented in ART 4213. (Prerequisite: ART 4213)

**ART 4333 PAINTING III** A continuation of ART 3323, with emphasis on the human figure. (Prerequisite: ART 3323)

**ART 4343 PAINTING IV** A continuation of ART 4333, with emphasis on student experimentation and exploration of selected painting media. (Prerequisite: ART 4333)

**ART 4443 SCULPTURE II** Students will continue working with the four primary technical methods for producing sculpture. There will be at least three to four projects using one or more techniques in producing 3-D sculpture. (Prerequisite: ART 3433)

**ART 4513 APPLIED GRAPHIC DESIGN I** This course involves portfolio production of advanced products of graphic design using both vector and raster graphics (Prerequisites: all previous major requirements with a grade of C or better)

**ART 4613 APPLIED GRAPHIC DESIGN II** This class is a continuation of ART 4513 to refine skills in development of the final graphic design portfolio. This class is the final capstone for graphic design. (Prerequisite: ART 4513 with a grade of C or better)

**ART 4773 METHODS & MEDIA IN ART** Includes comprehensive organizational and instructional techniques, strategies, and materials for development and delivery of art lessons related to appropriate developmental levels K-12. (Will not count toward a major or minor in Art.) (Prerequisite: admission to Teacher Education)

**ART 4814 # DIGITAL PHOTOGRAPHY II** This course will build upon knowledge gained in Digital Photography I to provide an advanced understanding of the art form of digital photography, capturing the human element and how this medium affects contemporary society. Digital camera with capability of manual settings required. Pre-requisite: ART 3813

**ART 4950 INTERNSHIP** On the job experience in practical applications. Student will be expected to secure a source/location that must be approved by department

**ART 4960 DIRECTED READING** Topic is assigned by the Faculty, student and Department Chair.

**ART 4970 SPECIAL STUDIES** Content is determined by the Faculty, student and Department Chair to provide additional strength or to remove deficiencies

**ART 4980 SEMINAR** Content is determined by the Faculty, student and Department Chair to provide a specialized learning experience in a group situation.

**ASL 1113 # INTRODUCTION TO AMERICAN SIGN LANGUAGE** Introduction to American Sign Language and Deaf culture. Emphasizes acquisition of both comprehension and production skills so the student may function in situations at a appropriate to the novice signer. Includes visual readiness and fingerspelling activities with language practice within meaningful contexts.

**AVIA 1004 PRIMARY GROUND INSTRUCTION** A fundamental study of the technical subject matter necessary to operate safely as a Private Pilot. Subject matter includes but is not limited to basic aerodynamics and aircraft performance, aviation regulations, cross-country flight planning, basic meteorology, aeromedical factors, and aeronautical decision-making.

**AVIA 1041 PRIVATE FLYING** A basic flight course that focuses on the knowledge and skills required to exercise the privileges and responsibilities of a Private Pilot. Course content includes but is not limited to airport operations, takeoff and landings, navigation, and slow flight and stalls. Additionally, students will become proficient in night operations, emergency operations, and safety procedures.

**AVIA 2061 GENERAL AVIATION** Individualized, introductory flight course with subject matter to include, but is not limited to; Knowledge of Federal Regulations, aerodynamics, performance calculations,

aircraft system operations, navigational techniques and aids, physiological and weather considerations. The level of knowledge will correspond with the students' FAA issued pilot certificate (Permission required)

**AVIA 2083 COMMERCIAL PERFORMANCE & REGULATIONS** An intermediate study of the technical subject matter necessary to safely operate as a Commercial Pilot. Subject matter includes, but is not limited to, a working knowledge of Federal Regulations to include: Parts 1,43,61,71,91,97,103,119,135,141,830;aerodynamics;performance calculations,and aircraft system operations for single engine high performance complex airplanes. (Permission required)

**AVIA 2113 AVIATION MANAGEMENT** An introduction to the techniques of developing a public airport and the study of the major functions of airport management including creation of master planning documents, economic, and social impact, and environmental concerns or restrictions.

**AVIA 2334 PHYSICS OF AIRCRAFT POWERPLANTS** This course is an introduction to the theory of maintenance and operation of turbine and piston aircraft engines, for pilots. The lab portion will include hands on experience in the operation, disassembly, inspection, overhaul and testing of both piston and turbine engines. In addition theory of aircraft propeller systems will be introduced.

**AVIA 3003 AVIATION METEOROLOGY** A study of the atmosphere and factors affecting weather systems. Also includes pilot weather services, including weather reports, weather forecasts, and weather maps.(Prerequisite AVIA 1004)

**AVIA 3023 AIR TRAFFIC CONTROL** An extensive overview of the Air Traffic Control system within which both pilots and aviation managers will operate including the terminology of the system. (Prerequisite: AVIA 3284)

**AVIA 3103 RESEARCH OF CORPORATE FLIGHT DEPARTMENT** The student will develop insights into the workings of the corporate flight department and how it interfaces with the rest of the corporation. Extensive on-site research and correspondence.

**AVIA 3113 AVIATION LEGAL PROBLEMS** To acquaint students pursuing aviation careers with the complex legal and regulatory responsibilities to be confronted, analyzed and resolved in a rapidly changing environment.

**AVIA 3123 COMMERCIAL OPERATIONS** A continuation of AVIA 2083. A study of the technical subject matter necessary to safely operate as a Commercial Pilot. Subject matter includes, but is not limited to; a working knowledge of navigational planning, to include, dead reckoning, pilotage and navigational aid operations; physiological and weather considerations; Federal Regulations, aerodynamics; performance calculations; and aircraft system operations. (Permission required)

**AVIA 3133 AVIATION ADMINISTRATION** This course exposes the career oriented student to administrative and regulatory requirements and skills necessary to function in industry as mid-level managers. Case studies will be reviewed and analyzed.

**AVIA 3143 # HISTORY OF AVIATION AND ITS IMPACT UPON SOCIETY** A study of the development of aviation throughout the world from ancient mythology through the space-age, including current developments, and their impact upon the world. Aviation History (Previously listed as Aviation History)

**AVIA 3152 FUNDAMENTALS OF FLIGHT INSTRUCTION** This course is a study of the fundamentals of flight instruction involving educational principles of the learning and teaching process, communication, teaching methods, critiquing, evaluating, and planning instructional activity. (Block class with current enrollment in AVIA 3202, Permission required)

**AVIA 3163 INTERMEDIATE AIRCRAFT MANEUVERS AND NAVIGATION** An intermediate flight course focusing on the knowledge and skills that are required to exercise the privileges and responsibilities of a Commercial Pilot. Course content includes but is not limited to emergency operations, safety



procedures, slow flight and stalls, cross-country training into high-density airspace. Additionally commercial pilot applicants will become proficient in performance maneuvers such as eights on pylons, lazy eights, and chandelles. (Permission required)

**AVIA 3173 AVIATION SAFETY** A basic mid-curriculum class which will provide students with a working knowledge of airport, aviation flight, and ground safety. This course will enhance leadership potential of current aviation students and provide knowledge in the areas of law, medicine, business, and societal issues dealing with aviation and airport safety.

**AVIA 3202 FLIGHT INSTRUCTOR GROUND INSTRUCTION** Students will plan and present individual oriented instructional activity aimed toward the use of effective teaching learned in AVIA 3152. Key topics include, course of training, blocks of learning, training syllabus, developing and presenting lesson plans. The mastery of the following subjects matter to include, but is not limited to; Federal Regulations, aerodynamics, performance calculations, aircraft system operations, navigational techniques, Private and Commercial flight maneuvers, physiological and weather considerations (Permission required)

**AVIA 3213 CORPORATE INTERNSHIP** Designed to expose the student with workings of the corporate flight department and permit hands-on experience with flight planning, ground transportation, scheduling, catering, dispatching and other duties and responsibilities confronting the corporate pilot or mechanic. Time will be spent on site with various flight departments throughout the country.

**AVIA 3223 ADVANCED TURBINE AIRCRAFT** Puts the student into the cockpit, either simulated or actual, placing added workload and decision-making situations in the path of success. Cockpit Resource Management concepts will be emphasized.

**AVIA 3233 ADVANCED AIRCRAFT SYSTEMS** This course is designed to familiarize the student with advanced aircraft systems of modern turbojet aircraft in the air transport category. Basic knowledge of electrical, hydraulic, pneumatic, and jet engine powerplant systems are covered. Instruction is presented similar to an airline ground-training program, which stresses the operational knowledge required of a pilot. The focus is on a Boeing 737 NG aircraft (Prerequisites: AVIA 1041, AVIA 2083 and AVIA 3123)

**AVIA 3241 FLIGHT INSTRUCTOR FLYING** A comprehensive flight course concentrating on the knowledge and skills required to operate safely as a Certified Flight Instructor. Includes performance and analysis of training procedures and maneuvers such as stalls from various configurations; spin entry and recovery techniques; preparations of lesson plans; evaluations of student flight performance; effective preflight and post flight instruction; analysis and correction of common student pilot flight errors and flight instructor responsibilities. (Permission required)

**AVIA 3284 INSTRUMENT GROUND INSTRUCTION** A comprehensive study of the technical subject matter necessary to operate safely as an instrument rated pilot within a complex airspace system. In addition to an analysis of departure, en route, and arrival procedures, including both precision and non-precision instrument approach procedures, students will gain insight into technical subjects such as advanced navigation methods, IFR emergency procedures, and aircraft systems related to IFR flight. (Permission required)

**AVIA 3293 AVIATION TRANSPORTATION** A study of the air transportation industry with a thorough knowledge of the organizational matrix, management responsibilities, and functional characteristics of international, major, national, and regional air carriers.

**AVIA 3322 ADVANCED AIRCRAFT AND INSTRUMENTAL FLYING** An advanced flight course focusing on the knowledge and skill that are required to operate safely as an instrument rated pilot. The student will then transition into the technology advanced aircraft and complete the course flying in a complex aircraft meeting all the requirements for the commercial pilot certificate (Permission required)

**AVIA 3334 ADVANCED AERODYNAMICS** This course is designed to prepare the student to understand and apply aerodynamics principles as they relate to advanced high performance aircraft. (Prerequisites MATH 2143 and PHYS 1114)

**AVIA 3362 INSTRUMENT FLIGHT INSTRUCTOR GROUND INSTRUCTION** A comprehensive classroom study of the technical subject matter and teaching methods associated with preparing pilots for the knowledge portion of the instrument rating practical exam. (Permission required)

**AVIA 3401 INSTRUMENT FLIGHT INSTRUCTOR FLYING** A flight course that focuses on the knowledge and skills required to operate safely as Certified Flight Instructor with instrument privileges. The course's focal point is an in-depth study of effective teaching methods associated with instrument flight training and the analysis and correction of common student errors. (Permission required)

**AVIA 3451 INTRODUCTION TO ADVANCED TECHNOLOGY AIRCRAFT** This course is designed to provide the professional pilot majors the necessary knowledge to transfer from legacy technology to current commercial cockpit design. This course will be an overview of advanced technology cockpit design and will incorporate the Garmin G1000 cockpit display.

**AVIA 3503 INTEGRAT OF FLIGHT MNGT TECH&COMMERCIAL OPERATION** This course is designed to provide professional pilot majors with an introduction and working knowledge of commercial flight operations incorporating the Boeing 737 Flight Management Systems. It also provides an in-depth study of FAA14 CRF parts 121 and 135 commercial operations.

**AVIA 4413 NATIONAL AND INTERNATIONAL OPERATIONS** Prepares students to conduct complex national and international trip planning. (Prerequisite: BIM 1553) (Must be taken in residence)

**AVIA 4444 SECOND OFFICER-FLIGHT ENG WRIT TEST CERTIFICATE I** Sixty (60) hours classroom instruction. Preparation for FAA Flight Engineer Basic written examination.

**AVIA 4485 SECOND OFFICER-FLIGHT ENGINEER WRIT TEST CERT II** One hundred seventy-five (175) hours classroom instruction. Preparation for FAA Flight Engineer Turbojet written examination.

**AVIA 4524 SECOND OFFICER-FLIGHT CERTIFICATE** Ten (10) hours of Boeing 727 logable F.E. simulator time plus other considerations.

**AVIA 4562 MULTIENGINE GROUND INSTRUCTION** Theory of multiengine airplane operation including the ground instruction necessary for preparation for the FAA multiengine rating. covers transition to multiengine aircraft, multiengine aircraft systems, operational considerations, and emergency procedures. (Permission required)

**AVIA 4601 MULTIENGINE FLYING** An advanced flight course that focuses on the safe operation of high performance multiengine aircraft. A significant portion of this course will center on flight in a failed engine condition by introducing students to Vmc demonstrations and single engine flight in various drag configurations. Additionally, students will be exposed to procedures associated with engine failures during and immediately following takeoff, cruise flight, and during landings. (Permission required)

**AVIA 4613 AVIATION MANAGEMENT INTERNSHIP** A supervised professional level work experience to expose the student to management practices in the aviation industry. (Prerequisite: Junior standing)

**AVIA 4621 MULTIENGINE FLIGHT INSTRUCTOR GROUND INSTRUCTION** Principles and methodology of teaching multiengine flight. Including the ground instruction required to prepare for the FAA Flight Instructor-Airplane Multiengine rating. Covers teaching methods for transition to multiengine aircraft, multiengine aircraft systems, operational considerations, and emergency procedures. (Permission required)

**AVIA 4631 MULTIENGINE FLIGHT INSTRUCTOR FLYING** A flight course intended to prepare the certified flight instructor for the additionally responsibilities of teaching in a multiengine aircraft. In addition to the effective performance and analysis of multiengine procedures, this course prepares students to anticipate and avert common training mishaps associated with the idiosyncrasies of multiengine flight training. (Permission required)

**AVIA 4643 PHYSIOLOGY** A study of the physical and mental effects of flight as related to aircrew personnel performance and passenger comfort/behavior.

**AVIA 4651 ADVANCED CREW COORDINATION** Flight instruction emphasizing crew coordination, crew resource management, command-response checklist procedure, and functioning as a flight crew in the corporate flight environment. (Prerequisite: AVIA 4601)

**AVIA 4663 CONTEMPORARY TOPICS IN AVIATION** A detailed analysis of current issues facing management in various segments of the aviation industry. The social and economic impact that the aviation industry has on the U.S. and world economy is investigated in detail. Application of previously learned concepts are applied to real world and time sensitive case studies to develop a deeper understanding of current and forecast problems in aviation. (Prerequisites: Senior standing)

**AVIA 4674 CREW RESOURCE MANAGEMENT** This course is designed to be a senior capstone achievement, which will require the pilot student to utilize all previous training and education to demonstrate good Crew Resource Management (CRM) skills in a commercial two-pilot cockpit environment. Line Oriented Flight Training (LOFT) will allow the student to demonstrate the CRM skills of a captain and copilot. Students will research and analyze human performance related to various major accidents. (Prerequisites: permission required)

**AVIA 4703 AIRLINE TRANSPORT PILOT GROUND INSTRUCTION** Seventy-five (75) hours classroom instruction. Preparation for FAA Airline Transport Pilot written examination. (Prerequisite: departmental approval)

**AVIA 4801 AIRLINE TRANSPORT PILOT FLYING** A minimum of 25 hours dual instruction. Preparation for FAA Airline Transport Pilot flight test. (Prerequisite: AVIA 4703)

**AVIA 4970 SPECIAL STUDIES** Individualized project selected in consultation with professor.

**AVIA 4980 SEMINAR** Small group study of topic announced by department.

**AVIA 5103 AEROSPACE SAFETY PROGRAM DEVELOPMENT** This course is designed to provide the essential elements critical to the development, identification, and implementation of an aerospace safety program. Critical measures are discussed and emphasized as integral elements of a comprehensive safety program with focus on identification and prevention of unique safety problems in aerospace. Interaction between national and state government, corporate, and local regulations will be examined in detail supplemented with pertinent case studies.

**AVIA 5153 AIRCRAFT ACCIDENT INVESTIGATION** This course is designed to examine the critical analysis of selected aircraft accidents and an evaluation of causal factors. Particular emphasis is placed in the study of human factors connected with flight and crew activities in aerospace operations. Interactions and cooperative agreements between international, national and state government, corporate, and local jurisdictions will be examined in detail supplemented with pertinent case studies. Field investigation techniques, laboratory techniques for accident reconstruction, analysis of cockpit voice recorders, flight data recorders, and air traffic control radar and voice tapes will be examined.

**AVIA 5203 LEGAL AND ETHICAL ISSUES IN AEROSPACE** This course addresses legal questions in the field of aviation and ethical factors involved therein. Current issues will be used as the medium for study of the legal and moral concepts that influence developments in both national and international air law. U.S. government and ICAO publication, aviation case reports, air law journals and international aviation

treaties will be used as legal support materials. Legal and ethical considerations directly challenging the aviation professional will be addressed through case studies.

**AVIA 5213 AEROSPACE ECONOMICS AND FISCAL CONTROL** The major areas of emphasis of this course are the role of government, union and management relations, airline integration, centralized scheduling, flight and crew operations center structures, and crew management. The course will also examine the integration of all the areas of fiscal impact to include advertising, customer relations, maintenance coordination, compute code share, calculate air seat mile and the impact of the profit/loss.

**AVIA 5223 AEROSPACE HAZARD CONTROL AND ANALYSIS** This course examine the modern aerospace work environment from a safety and health point of view. Hazard control of the various substances used in, on and around the airport property, as well as the substances used and carried on aircraft will be reviewed with respect to the proper handling, disposal and emergency procedures. A comprehensive review and understanding of EPA and OSHA policies and procedures is a fundamental tenet of this course.

**AVIA 5233 LOGISTICAL STRATEGIES IN AEROSPACE ADMINISTRATION** This course is designed to acquaint the student with the modern requirements for application of Logistics as a Strategy for success in Aviation and Aerospace Administration. The course covers the various applications of Logistics in the Department of Defense and the Commercial Aviation sectors The course focuses on the various strategies for the successful support of Aviation and Aerospace operations in all phases of the logistic process from acquisition through distribution, sustainment, and disposition. Contemporary topics, such as workforce diversity, and the application of lean manufacturing to distribution, logistics, and supply chain management programs are included in the curriculum.

**AVIA 5303 MNGT AND ADMINISTRATION OF AEROSPACE CONTRACTS** The focus of this course is the comprehensive analysis of the procurement process and the various contractual relationships in the aerospace industry. This course also provides a detailed review of the laws and right governing the contractual process from design through product delivery and material maturity.

**AVIA 5313 AEROSPACE FINANCE** A lecture, discussion and hands-on introduction to economic concepts involved in aviation economic decision analysis. Student application will include performing a Benefits-Cost-Analysis, which will develop techniques for defining and measuring relevant economic units for comparison. This course will introduce students to real world cost modeling business applications using Microsoft Excel. Each student team member will also gain practical hands-on experience in financial decision making as a member of the board for a simulated regional airline. Student teams will compete during the semester modifying regional airlines financial obligations and evaluating the results through interpolation of quarterly reports.

**AVIA 5323 AIRPORT OPERATIONS** This course addresses operational requirements, responsibilities, and management approaches relevant to major U.S. and international commercial service airports. Both FAA & ICAO standards and methods will be studied in detail for topics such as airport licensing, air side operations, and land side operations, operational safety, coordination of maintenance and construction, aviation security, and disaster preparedness.

**AVIA 5333 AEROSPACE MARKETING** This course focuses on the fundamental skills of aerospace marketing used by executives in complex, formal organizations. Wherever possible, special emphasis will be placed on the aviation industry. The various functions, aspects and characteristics of aerospace marketing will be reviewed in the context of today's organizational environment and students will be asked to identify the skills that must be applied to planning a marketing strategy that solves the day-to-day challenges in a company or organization.

**AVIA 5343 IMPLEMENTING LOGISTICS:ACQUISITION & PROGRAM MNGT** This course is designed to give the student experience in the practical applications of the implementation of systems acquisition process. The course will cover the various policies and philosophies used by the Department

of Defense(DoD) and commercial industry to provide for program management within each phase of the systems acquisition process. This course will utilize a team building concept and require that students participate in case study evaluations of various acquisition strategies

**AVIA 5423 APPLICATIONS IN CREW RESOURCE MANAGEMENT** This course will focus on problems and solutions in decision making and communication unique to aerospace operations. This course will examine methods to improve effective crew management utilizing the common concepts of Crew Resource Management (CRM) as developed by major air carriers and explore the theoretical basis of such training. Topics such as supervision of crewmembers, counseling, accountability and role management will be studied. Each student will assist in the development of a CRM program.

**AVIA 5513 QUANTITATIVE ANALYSIS OF AEROSPACE DATA FOR ADMIN** This course will introduce the student to concepts, methods and an assortment of quantitative management tools available to the Aerospace Manager. This course emphasizes an applied approach providing a practical understanding of: project management, product design, project control, learning curve theory, critical path analysis and break-even analysis. This course will introduce students to real world statistical business applications using Microsoft Excel.

**AVIA 5523 RESEARCH METHODS IN AEROSPACE** Concepts and methods of the scientific research process within the context of business and management. The course emphasizes an applied approach providing a thorough understanding of the nature and scope of business research. Student application will include developing and presenting a five chapter Graduate Research Study. Study format will include: Chapter One: Introduction; Chapter Two: Review of the Literature; Chapter Three: Procedures; Chapter Four: Findings and Chapter Five: Summary and Conclusion. This course will introduce students to real world statistical business applications using Microsoft Excel.

**AVIA 5533 COMMUNICATION IN AEROSPACE MANAGEMENT** This course focuses on the fundamental skills of business communications used in complex, formal organizations. Wherever possible, special emphasis will be placed on the aviation industry. The various functions, aspects and characteristics of business communications will be reviewed in the context of today's organizational environment and students will be asked to identify the skills that must be applied to planning a communications strategy that solves the day-to-day challenges in a company or organization. A wide array of teaching methods will be used, including textbook and outside readings, student presentations, instructor presentations, outside speakers, group discussion, case studies, and audio-visuals.

**AVIA 5543 SYSTEMS ENGINEERING APPLICATIONS FOR LOGISTICS** This course will cover the process in Logistics referred to as Systems Engineering (SE). The Systems Engineering processes covered in this course consist of a rigorous and interdisciplinary set of interactive activities that are designed to support the full life cycle of any product. Students will learn the principles and techniques that are involved in the SE processes that fully integrate cost, scheduling, and performance into the rationale and methodologies that support all necessary management decisions, often referred to a process inputs and outputs

**AVIA 5613 THE ETHICS OF DECISION MAKING-MANAGING CONSEQUENCE** Courses in ethics and ethical-centered decision making exist within most engineering, law, business and medical schools, but very little is done specifically to prepare the aerospace professional for their role in decision-making. This course seeks to create a high awareness on the part of aviation and space professionals with regard to their potential impact on these issues and give them skills to effectively deal with such critical problems.

**AVIA 5950 GRADUATE INTERNSHIP IN AEROSPACE** The graduate internship is aerospace course is an academic and professional activity that is coordinated by the university between aerospace related organizations and the student. An internship in aerospace provides the student with an opportunity to extend their academic endeavors through the applications of theories and philosophies studied in the classroom to specific activities.

**AVIA 5960 DIRECTED READINGS IN AEROSPACE** This course provides an opportunity to augment or develop specialized areas in the aerospace curriculum as determined by the instructor. Students may elect to perform a special, directed analysis and or independent study in an area of particular interest. A detailed proposal of the project must be developed and presented to the instructor for approval.

**AVIA 5980 SEMINAR IN AEROSPACE TRENDS** The seminar in aerospace trends is designed to provide individual and group research projects into contemporary issues confronting aerospace administrators. The dynamics of this course require the students present their findings to a group of their peers in a formal academic environment.

**BIM 1553 BUSINESS COMPUTER APPLICATIONS** This course introduces the use of the computer in a business setting. Office applications, the use of the Internet, and searching online database are introduced and discussed. Applications included word processing, spreadsheet, database and graphics programs. Students will learn to use the applications to analyze and solve basic business problems.

**BIM 1563 DESKTOP DOCUMENT PRODUCTION** Preparation of documents using desktop publishing software.

**BIM 2113 CAREER SEARCH** A study and evaluation of contemporary and developing careers in the business world. Students will focus their individual study on one or more specific careers of their interest.

**BIM 2273 KEYBOARDING LETTERS & REPORTS** Emphasis on improving skills and preparing business-related documents. (Prerequisite: beginning keyboarding course with a minimum grade of C)

**BIM 2313 DATABASE MANAGEMENT SYSTEMS** Mastery of an electronic database system in a business environment including planning, creating, managing, and manipulating a database.

**BIM 3133 INTRODUCTION TO COMMUNICATIONS** Grammar and its application to verbal communications.

**BIM 3173 WORD PROCESSING APPLICATIONS** Emphasis on office simulations which provide opportunity for decision making and setting priorities. (Prerequisite: BUSI 2273 or an intermediate keyboarding course with a minimum grade of C)

**BIM 3183 BUSINESS INFORMATION MANAGEMENT** Examines business information systems theory and business applications. Topics include components of the life cycle, business information analysis, design and implementation. (Prerequisites: BIM 1553 and junior standing)

**BIM 3353 INFORMATION RESOURCES MANAGEMENT** Application of systematic analysis and scientific control of business records from their creation through processing, maintenance, protection, and final disposition.

**BIM 4253 INDUSTRY TRAINING AND DEVELOPMENT** Preparation of trainers to develop, deliver, and evaluate training programs in business and industry and other organizations. Oral and written communication skills and techniques for teaching the adult learner are emphasized.

**BIM 4653 ORGANIZATIONAL SYSTEMS & TECHNOLOGIES** An overview of office systems within organizational and environmental contexts. Improvement of productivity is stressed. Major technologies that support information creation, storage, retrieval, manipulation, and distribution are covered.

**BIM 4763 TELECOMMUNICATIONS FOR MANAGERS** Overview of telecommunications in business information management. Topics include theory and management issues relative to telecommunications methods, data codes, protocols, network architectures, local area networks, communications media, hardware and software, including group systems software. An emphasis will be on the applications of telecommunications to facilitate the interchange of business information in many forms: voice, data, text, and image. (Prerequisites: BIM 3183)

**BIM 4950 INTERNSHIP** Supervised professional level work assignment with a business firm, government agency, or nonprofit agency. (Prerequisites: ACCT 2203, FIN 3113, MKT 3233, MNGT 3143, and permission of instructor)

**BIM 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor.

**BIM 4970 SPECIAL STUDIES** Individualized project selected in consultation with professor.

**BIM 4980 SEMINAR** Small group study of topic announced by department.

**BIM 4990 RESEARCH** Independent investigation designed in consultation with the professor.

**BIM 5123 MANAGERIAL COMMUNICATIONS** A study of the procedures and methods of gathering and organizing data, interpreting and presenting decisions, facts and ideas. Written communication, oral communication, and multi-media presentation skills will be presented, as well as principles of negotiation and persuasion at a managerial or executive level.

**BIM 5193 METHODS FOR TEACHING BUSINESS TECHNOLOGIES** Emphasis on teaching computer applications for the modern office; software packages, instructional units, objectives, standards, evaluation, research.

**BIM 5293 PRINCIPLES OF VOCATIONAL BUSINESS EDUCATION** Organization and development of vocational programs in business; federally-aided high school programs.

**BIM 5693 METHODS FOR TEACHING BUSINESS SUBJECTS** Problems, materials, and methods of teaching accounting, business communications, business math, economics, and general business.

**BIM 5793 MANAGEMENT INFORMATION SYSTEMS** The role of information systems in organizations and managing in an Information Age. Topics include the design of information systems to support the organization's strategic plan, information resource management, structure of a management information system, human-machine information systems, and implementation issues.

**BIM 5960 DIRECTED READINGS** Supervised reading of significant literature not included in regularly scheduled courses.

**BIM 5970 SPECIAL STUDIES** Development of instructional materials and plans based on individual and group interests and needs.

**BIM 5980 SEMINAR** Intensive study of selected problems in business education.

**BIM 5990 RESEARCH** Intensive study, analysis, and evaluation of research in business education and related fields.

**BIOL 1114 # GENERAL BIOLOGY** An introduction to the unifying principles of biology. The methods of science will be illustrated in the study of the chemistry of life, cell structure and function, energy, genetics, development, evolution, and ecology. With laboratory.

**BIOL 1133 # BASIC NUTRITION** Fundamental principles of human nutrition for all ages. (Will not satisfy general education requirements in Biological Sciences. Cannot be used for a major or minor in the department)

**BIOL 1143 MEDICAL TERMINOLOGY** Introduction to terms used to describe parts of the body, and to learn the meaning of words used to denote signs and symptoms of diseased conditions, diagnostic and surgical procedures, as well as treatments used. (Cannot be used in a major or minor within the department.)

**BIOL 1404 # PRINCIPLES OF BIOLOGY I** An introductory course for the biological sciences which covers the scientific method, cell chemistry and metabolism, molecular genetics, and Mendelian genetics. With laboratory

**BIOL 1504 # PRINCIPLES OF BIOLOGY II** An introductory course for the biological sciences which covers the kingdoms of living organisms, plant and animal physiology, population genetics, evolution, and ecology. With laboratory (Prerequisite: BIOL1404)

**BIOL 2114 # INTRODUCTORY MICROBIOLOGY** The study of microorganisms including their anatomy, metabolism, and genetics. The course will also stress medical microbiology including microbial diseases and the body's response to pathogens. With laboratory. (Prerequisite: BIOL 1404 and either; CHEM 1004, CHEM 1114 or CHEM 1315)

**BIOL 2203 # NATURE STUDY** Identification, life histories, ecological relationships of local plants and animals. With laboratory. (For Elementary and Secondary Education majors)(Prerequisite: BIOL 1114 or BIOL 1404)

**BIOL 3404 # GENETICS** Study of basic principles of genetics of bacteria, plants, and animals. With laboratory. (Prerequisites: BIOL 1504 or BOT 2114 and ZOO 2114)

**BIOL 3414 # ECOLOGY** The relations of plant and animal populations to themselves and environment. With laboratory. (Prerequisite: BIOL 1114 or BIOL 1404 or BOT 2114 and ZOO 2114)

**BIOL 3614 # HUMAN PHYSIOLOGY** A study of the functions of the human organ systems. The biochemical and metabolic processes involved in homeostasis are examined at the cellular, histological, and systemic levels. With laboratory. (Prerequisite: BIOL 1404 and either;CHEM 1004, CHEM 1114 or CHEM 1315)

**BIOL 3624 # HUMAN ANATOMY** A study of the structure of the human body at the developmental, cellular, histological and gross levels. With laboratory. (Prerequisite: BIOL 1404 and either; CHEM 1004, CHEM 1114, or CHEM 1315)

**BIOL 3702 # HISTORY OF BIOLOGY** Historical development of biological theories, principles, and methods. (Prerequisites: BIOL 1504 or BOT 2114 &ZOO 2114)

**BIOL 3814 # CELL AND MOLECULAR BIOLOGY** With laboratory. Study of eukaryotic cell structure and function covering the areas of cellular biochemistry, physiology, metabolism, gene regulation, and the cell cycle. (Prerequisites: BIOL 3404)

**BIOL 3913 # BIOSTATISTICS** A course designed to familiarize students with statistical tests used by researchers to summarize and analyze biological data, such as Chi<sup>2</sup>, Paired t, student's t, Regression Analysis, and Analysis of Variance. (Prerequisite: MATH 1513 or higher)

**BIOL 4115 # MICROBIOLOGY** The study of microorganisms and their interactions with mankind and the environment. With laboratory. (Prerequisite: BIOL 2114)

**BIOL 4124 # MOLECULAR GENETICS** A study of gene organization and control of gene expression in prokaryotes and eukaryotes, emphasizing applications in modern biotechnology, and the genetic and biochemical techniques involved in manipulating and assaying gene expression. Integrated lab and lecture format. (Same as CHEM 4124) (Prerequisites: CHEM 3053 with a grade of C or better, CHEM 3062, BIOL 2114, BIOL 3814 and BIOL 3404; recommended corequisite: CHEM 4115 or departmental approval.)

**BIOL 4193 # METABOLISM** The study of molecular and subcellular events involved in the process of metabolism and bioenergetics. (Same as CHEM 4193) (Prerequisite or Corequisite: CHEM 4115)



**BIOL 4303 # EVOLUTION** Historical development of evolutionary concept; origin of life, species, and higher taxons; evolutionary mechanisms; genetic variation, natural selection, and population genetics. (Prerequisites: BIOL 3404)

**BIOL 4314 # IMMUNOLOGY** A study of the molecular and cellular mechanisms of immunity. Lab required. (Same as CHEM 4314) (Prerequisite: BIOL 2114)

**BIOL 4423 # DEVELOPMENTAL BIOLOGY** The study of the processes and events involved in differentiation and development from gametogenesis through the embryonic and fetal periods. The human is used as the primary model organism. Developmental disorders are also examined. (Prerequisite or corequisite: BIOL 3624)

**BIOL 4434 # HISTOLOGY** A study of the primary tissues and the cellular and tissue morphology of the human organ systems. Histological alterations in disease states are also examined. With laboratory. (Prerequisite or corequisite: BIOL 3624)

**BIOL 4642 BIOETHICS** This course examines the principles, concepts, and applications of bioethics. Historical, current, and future bioethical issues will be examined. (Prerequisite: BIOL 1114 or BIOL1404.)

**BIOL 4653 HUMAN DISEASE** The study of diagnostic techniques, basic disease processes, and the pathophysiology of the major organ-related diseases. (Prerequisite: BIOL 2114 and BIOL 3614)

**BIOL 4673 # WILDLIFE LAW** To introduce students to the field of wildlife law enforcement, the roles and duties of an Oklahoma Game Warden, and the state and federal wildlife laws enforced in Oklahoma. Prerequisite: CONS 1124 or BIOL 3414

**BIOL 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: 20 hours of biological science and permission)

**BIOL 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**BIOL 4980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 20 hours of Biological Sciences)

**BIOL 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**BIOL 5113 RECOMBINANT DNA METHODS** Course examines theoretical background in Recombinant DNA Technology and provides opportunities for students to obtain laboratory experience in recombinant DNA technology. (Prerequisites: 30 semester hours of undergraduate biological and/or physical sciences. (Same as CHEM 5113)

**BIOL 5124 MOLECULAR GENETICS** A study of gene organization and control of gene expression in prokaryotes and eukaryotes, emphasizing applications in modern biotechnology, and the genetic and biochemical techniques involved in manipulating and assaying gene expression. Integrated lab and lecture format. (Prerequisites: CHEM3062, BIOL 2114, BIOL 3814, BIOL 3404 and C or better in CHEM3053. Recommended co-requisite: CHEM 4115 or departmental approval)

**BIOL 5153 RESEARCH METHODS** Techniques of experimental design (factor analysis, etc.) for conducting research projects, and in the various methods used to communicate research findings to the scientific and technological community.

**BIOL 5303 EVOLUTION** Historical development of evolutionary theory; genetic variation in populations; natural selection and other evolution mechanisms; origin of life and history of life on Earth; relevance of evolution to medical science and conservation. Includes research paper.

**BIOL 5314 IMMUNOLOGY** A study of the molecular and cellular mechanisms of immunity. Lab required. (Prerequisite: BIOL 2114)

**BIOL 5423 DEVELOPMENTAL BIOLOGY** The study of the processes and events involved in differentiation and development from gametogenesis through the embryonic and fetal periods. The human is used as the primary model organism. Developmental disorders are also examined. (Prerequisite or corequisite: BIOL 3624)

**BIOL 5434 HISTOLOGY** A study of the primary tissues and the cellular and tissue morphology of the human organ systems. Histological alterations in disease states are also examined. With laboratory. (Prerequisite or BIOL 3624)

**BIOL 5553 POPULATION BIOLOGY** Principles and theories of the structure and dynamics of natural populations including their ecological, genetic, and evolutionary organization. (Prerequisite: B.S. or B.A. in Biology, Conservation, or related field)

**BIOL 5642 BIOETHICS** Introduce students to basic concepts, principles, and issues related to bioethics. Objectives include developing a wide array of student's abilities including library and on-line research skills, giving oral and computer-aided presentations, logic and argumentation skills, critical thinking and analysis skills, and written advocacy of different sides of bioethical issues.

**BIOL 5653 HUMAN DISEASE** The study of diagnostic techniques, basic disease processes, and the pathophysiology of the major organ-related diseases. (Prerequisite: BIOL 2114, BIOL 3614 and BIOL 3624)

**BIOL 5920 PROBLEMS IN BIOLOGY** (Prerequisite: 15 hours of biological science and permission)

**BIOL 5943 THE LIFE SCIENCE CLASSROOM** The goal of this course is to help educators acquire pedagogical content knowledge and skills that are necessary to teach life science for understanding, appreciation and interest by all students. The course includes analysis of secondary life science curriculum, planning of life science units and lessons, examination of inquiry models to teach life science concepts, and development of standards-based assessment. (Prerequisite: 8 hours of biological science with labs) (Previously listed as BIOL5940 Adv General Biology)

**BIOL 5960 DIRECTED READINGS** (Prerequisite: 15 hours of biological science and permission)

**BIOL 5970 SPECIAL STUDIES** (Prerequisite: 15 hours of biological science and permission)

**BIOL 5980 SEMINAR** (Prerequisite: 15 hours of biological science and permission)

**BIOL 5990 RESEARCH** Independent investigation designed in consultation with the professor. Limited to a maximum of six credit hours. (Prerequisite: 20 hours of Biological Sciences and permission)

**BLAW 3123 # LEGAL ENVIRONMENT OF BUSINESS** This course will consist of three main units of instruction. The first unit will cover an introduction to legal theory, legal and deductive reasoning, constitutional law, administrative law, the court system, civil and criminal procedures, alternative dispute resolution, criminal law and the concepts of tort and strict liability. The second unit, will consist of the study of common law contract theory and an introduction of the Uniform Commercial Code. The basic elements of contract will be examined, along with remedies, statute of frauds and third party rights. The final unit will consist of the application of the property, bailments, agency, employment law, business structures, intellectual property, E-commerce, international law, and other topics. The concept of ethics and proper business conduct will be emphasized throughout the course.

**BLAW 3133 LEADERSHIP ETHICS** A study of leadership in the context of self-governance, responsibility, adherence to principle, integrity, and constancy of purpose. The course specifically addresses how leaders build and maintain organizations which are guided by a sense of purpose,

responsibility, and ideals. Two facets of the leader's role are emphasized: the leader as decision-maker, and the leader as an organization builder. (Junior standing required)

**BLAW 3223 COMMERCIAL LAW** This course will consist of the study of the Uniform Commercial Code, with special emphasis on sales of goods, commercial paper and negotiable instruments, secured transactions, bankruptcy and creditors rights, proprietorships, partnerships, corporations, antitrust law, and the laws effecting entrepreneurs. The concepts of ethics and proper business conduct will be emphasized throughout the course. (Prerequisite: BLAW 3123)

**BOT 2114 # GENERAL BOTANY** The major concepts of botany, illustrated by the living plant. With laboratory. (Prerequisite: BIOL 1404)

**BOT 3213 # PLANT DIVERSITY** Designed to familiarize students with plant terminology, family characteristics, identification skills, and distribution in Oklahoma, and to instill an appreciation for plant diversity and values. (Prerequisite: BOT 2114)

**BOT 3814 # PLANT MORPHOLOGY** Life cycles, structures, anatomy of representatives of plant kingdom. (Prerequisites: BOT 2114)

**BOT 4202 # APPLIED SYSTEMATIC BOTANY** Use of dichotomous keys, collection of plants for use as herbarium specimens, plant research utilizing knowledge of plant diversity and evolution, and development of an appreciation for plant values (Prerequisite: BOT 3213)

**BOT 4214 # SYSTEMATIC BOTANY** Classification and identification of local flowering plants, as herbarium preparation. With laboratory. (Prerequisites: BOT 2114)

**BOT 4274 FOREST SYSTEMATICS** Identification, taxonomy, and distribution of trees, shrubs, and other important forest species of the United States. (Prerequisites: BOT 2114)

**BOT 4844 ECOLOGICAL AND RANGE TECHNIQUES** An introduction to field techniques used by ecologist to construct biological inventories for most plant types. To support the measurement techniques used to inventory the vegetation, part of the course will be dedicated to the identification of the local flora and to some statistical techniques used in summarizing ecological data. (Prerequisite: BIOL 2114)

**BOT 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**BOT 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**BOT 4980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 20 hours of Biological Sciences)

**BOT 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**BOT 5214 SYSTEMATIC BOTANY** Classification and identification of local flowering plants, plant collection. Special project required. With laboratory.

**BOT 5920 PROBLEMS IN BOTANY** Independent study designed in consultation with the professor. (Prerequisite: 15 hours of biological science and permission)

**BOT 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the professor. (Prerequisite: 15 hours of biological science and permission)

**BOT 5970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: 15 hours of biological science and permission)

**BOT 5980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 15 hours of Biological Sciences and permission)

**BOT 5990 RESEARCH** Independent investigation designed in consultation with the professor. Limited to a maximum of six credit hours. (Prerequisite: 20 hours of Biological Sciences and permission)

**BSN 1510 BASSOON LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**BSN 2510 BASSOON LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**BSN 3510 BASSOON UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**BSN 4510 BASSOON UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**BUS 1133 INTRODUCTION TO BUSINESS** Survey of business activities covering principles, problems and practices related to economic enterprises. (Not open to junior and senior business majors.)

**BUS 2633 BUSINESS STATISTICS** Applies descriptive and inferential statistics to business and economic problems. Statistical distributions are used to conduct interval estimates and hypothesis tests. Empirical evidence of cause and effect relationships is investigated through simple two variable linear regression and correlation analysis. (Prerequisite: Math ACT 21 or higher or completion of college algebra (MATH 1513))

**BUS 3233 BUSINESS COMMUNICATIONS** The essential qualities of business writing. (Prerequisites: ENG 1113 and 1213)

**BUS 3333 BUSINESS ETHICS** This course explores accounting, business and legal decision-making from an ethical perspective. It focuses on the business person as an ethical decision-maker and on the business as a socially moral agent. Case studies from the core business disciplines as well as supplemental materials or assignment for the disciplines are used as learning materials. (Prerequisites: junior standing and permission)

**BUS 4123 INTERNATIONAL BUSINESS AND LAW** The course provides the student with an overview of International Business relations and the various legal systems that such relationships will operate within. Public law of international business will be analyzed with special emphasis on commercial sales contracts, various legal systems and disputes resolution, treatise and custom laws, export and foreign licensing, and environmental law. The course will also explore the private law concept of business transactions comparatively with the United States common and statutory law. Present current events happenings will be discussed and how such events will affect unilateral laws such as economic crisis, wars and other social events or upheavals. The course will also contain specific emphasis with the legal system and the business relationships involving Native Americans. (Prerequisites: Senior standing and permission) ricans. (Prerequisites: Senior standing and permission)

**BUS 4803 NATIVE AMERICAN BUSINESS** This course continues the coverage of management skills such as leadership, motivation, organizational dynamics, personnel, budgeting, community and economic development, strategic planning, program evaluation, and grant writing within a Native American community and sovereign governmental context. (Prerequisite: MNGT 3113)\_

**BUS 4813 CONTEMPORARY ISSUES IN NATIVE AMERICAN LEADERSHIP** A study of the fundamental cultural, ethical and philosophical issues which are involved in Native American leadership. The course also includes an examination of the leadership styles of historical tribal leaders. (Prerequisite: MNGT3113)

**BUS 4901 CAREER DEVELOPMENT SEMINAR** This seminar is designed to help students transition from college to the professional work environment. The seminar will be led by SE faculty with guest speakers from across the university and from area businesses. Topics include developing a professional resume, interviewing skills, and business etiquette. (Prerequisite: senior level standing)

**BUS 5113 RESEARCH METHODS** Concepts and methods of the scientific research process within the context of business and management. The course emphasizes an applied approach providing a thorough understanding of the nature and scope of business research.

**BUS 5123 INTERNATIONAL LAW** The course is designed to give students a comprehensive introduction to international law issues, including historical development and fundamental principles of international law. Students will gain an understanding of the laws relating to international trade and business transactions and how markets, cultures and legal systems influence international business contracts.

**BUS 5253 DATA ANALYSIS FOR MANAGERS** Theory and application of statistical and quantitative techniques to various types of business data. Emphasis is on the interpretation and use of data analysis results from a manager's perspective. Use of statistical computer software is an integral part of course. Both descriptive and inferential statistics are covered.

**BUS 5563 APPLIED BUSINESS PROJECTS** The course should be taken during the student's next-to-last or last semester, and is designed to integrate the functional areas of business at the graduate level. Numerous projects will be used to evaluate and develop the skills and competencies deemed important for MBA graduates.

**CHEM 1004 # CHEMICAL CONCEPTS** A one-semester course for students with a degree plan such as nursing that has a one-semester chemistry requirement. This course is also recommended for students who need additional preparation before either of the other two tracks of chemistry or for those who wish to use the study of chemistry to satisfy their general education requirement. It includes fundamental knowledge of inorganic chemistry; with laboratory (2hr/wk) (Prerequisite: Elementary high school algebra skills. It may not be used on any major or minor)

**CHEM 1114 # BASIC CHEMISTRY I** The first semester of chemistry for students with a degree plan that requires a broad foundation in chemistry. This course is the ideal entry point for students who will major in Environmental Sciences or Occupational Safety and Health, those who will minor in Chemistry or who need only one year of general chemistry. It includes nomenclature, stoichiometry, atomic structure, chemical bonding; solutions; gas laws and thermochemistry; with laboratory (2hr/wk) This course does NOT satisfy the prerequisite for CHEM 1415. Corequisite: MATH 1303 or higher or two units of high school algebra

**CHEM 1214 # BASIC CHEMISTRY II** The second semester of chemistry of students with a degree plan that requires a broad foundation for chemistry. It is a continuation of CHEM 1114 and includes equilibrium, kinetics, thermodynamics, electrochemistry, qualitative analysis, organic chemistry, biochemistry and nuclear chemistry; with laboratory. This course can be used as a prerequisite for CHEM 1415, CHEM 3015 or CHEM3025. This course does NOT satisfy the prerequisite for CHEM 3053/3062 or CHEM 3425 (Prerequisite: CHEM 1114)

**CHEM 1315 # GENERAL CHEMISTRY I** The first semester of study for students with a degree plan that requires algebra-based, in-depth knowledge of chemistry. This course is the entry point for students who will major in Chemistry or Medical Science; for all students meeting general chemistry requirements for entrance into programs of advanced healthcare degrees and Chemistry minors. It includes nomenclature, atomic and molecular structure, stoichiometry, bonding, states of matter, thermochemistry, acids and bases, and gas laws; with laboratory (4hr/wk) (Prerequisite: one year of high school chemistry) Corequisite: MATH 1513, MATH 1543 or ACT Math score of 21 or better

**CHEM 1415 # GENERAL CHEMISTRY II** The second semester of study for students with a degree plan that requires algebra-based, in-depth of knowledge of chemistry. It is a continuation of CHEM 1315 with emphasis on kinetics, equilibrium, thermodynamics, electrochemistry, qualitative analysis, organic chemistry, biochemistry, and nuclear chemistry; with laboratory (4hr/wk) This course satisfies the prerequisite for CHEM 3053/3062 and CHEM 3425. Prerequisite:CHEM 1315 with a grade of C or better)

**CHEM 2014 # ORGANIC CHEMISTRY/BIOCHEMISTRY** Terminal course for students whose major does not require additional chemistry courses, e.g., science education. This course is an introduction to organic chemistry and biochemistry and will not count toward a major or minor in chemistry but will count toward a minor in Chemical Sciences (Prerequisite: CHEM 1214 or 1415 with a grade of C or better)

**CHEM 2024 INTRODUCTION TO ANALYTICAL METHODS** This course is designed to introduce the student to classical wet and modern instrumental analytical chemistry. The fundamentals of analytical statistics and its importance to data reliability will be discussed. The course will cover acid/base calculations, titrations, basic chemical equilibrium, atomic and molecular spectroscopic, chromatographic, and electroanalytical methods of analysis. Much of the laboratory experience will focus on modern methods of environmental analysis. This course will count toward a Chemical Sciences minor but will not count toward a Chemistry Major (Prerequisite: CHEM 1214 or 1415 with a grade of C or better)

**CHEM 2113 # INORGANIC CHEMISTRY I** Periodic properties of the elements and the structures, properties, and reactions of their compounds. (Prerequisite: CHEM 1214 or 1415 with a grade of C or better or departmental approval)

**CHEM 2212 INTRODUCTION TO RESEARCH** Group investigation of a laboratory research topic led by the professor, with related short students-selected projects developed in consultation with the professor, and a presentation of an overall research summary by each student. Discussions of the importance of research internships and how to apply, graduate research programs and research career opportunities, as well as experimental design, research poster design and research ethics. Prerequisite:CHEM 1315 or permission

**CHEM 2311 # CHEMICAL LITERATURE** This course is a study of the current literature of chemistry. Prerequisite:CHEM 1214 OR 1415

**CHEM 3053 # ORGANIC CHEMISTRY I** Introductory course emphasizing structure and reaction mechanisms of aliphatic and aromatic compounds. (Prerequisite: CHEM 1415 with a grade of C or better; corequisite: CHEM 3062)

**CHEM 3062 # ORGANIC CHEMISTRY I LABORATORY** Techniques such as purification/separation, physical characterization, reaction types, and synthesis of organic compounds. (Prerequisite or corequisite: CHEM 3053)

**CHEM 3153 # ORGANIC CHEMISTRY II** Continuation of CHEM 3053 with emphasis on other major classes of organic compounds. (Prerequisite: CHEM 3053 with a grade of C or better; corequisite:CHEM 3162)

**CHEM 3162 # ORGANIC CHEMISTRY II LABORATORY** Multi-step syntheses and identification of organic compounds, including instrumental methods. (Prerequisite or corequisite: CHEM 3153)

**CHEM 3425 # CHEMICAL ANALYSIS** Introductory course including treatment of analytical data; chemical equilibria; volumetric measurements; spectrophotometry; separations and electroanalytical methods, with laboratory. (Prerequisite: CHEM 1415 with grade of C or better)

**CHEM 3525 # INSTRUMENTAL ANALYSIS** Topics include basic electronics, computer control of chemical instrumentation, spectral, electrochemical and chromatographic methods of analysis, and laboratory automation, with laboratory. (Prerequisite: CHEM 3425 with a grade of C or better)

**CHEM 3612 # RADIOACTIVITY & NUCLEAR MEASUREMENT** Study of nuclear disintegrations and properties of alpha, beta, and gamma radiation; with laboratory. (Prerequisite: PHYS 1214 or 2115 or CHEM 1415) (Same as PHYS 3612)

**CHEM 3644 CHEMICAL TECHNOLOGY** Survey of industrial processes; special experimental problems in technique development; with laboratory. (Prerequisites: CHEM 2014 or 3055, and CHEM 3425)

**CHEM 4055 # ADVANCED ORGANIC CHEMISTRY** Emphasizes recent developments in the field. With laboratory. (Prerequisite: CHEM 3153 [with a grade of C or better] and CHEM 3162)

**CHEM 4115 # BIOCHEMISTRY I** The fundamental principles of chemistry applied to life processes, with laboratory. (Prerequisite: CHEM 3053 and CHEM 3062 with grade of C or better, and BIOL 1404 or BIOL 1114)

**CHEM 4124 MOLECULAR GENETICS** A study of gene organization and control of gene expression in prokaryotes and eukaryotes, emphasizing applications in modern biotechnology, and the genetic and biochemical techniques involved in manipulating and assaying gene expression. Integrated lab and lecture format. (Same as BIOL 4124) (Prerequisites: CHEM 3053 with a grade of C or better, CHEM 3062, BIOL 2114, BIOL 3814 and BIOL 3404; recommended corequisite: CHEM 4115 or departmental approval.)

**CHEM 4193 # BIOCHEMISTRY II** The study of molecular and subcellular events involved in the process of metabolism and bioenergetics. (Same as BIOL 4193) (Prerequisite: CHEM 4115 with a grade of C or better)

**CHEM 4213 # ADVANCED ANALYTICAL CHEMISTRY** Emphasizes recent developments in the field of analytical chemistry with a focus on chromatography and spectroscopy, with laboratory. (Prerequisite: CHEM 3425 with a grade of C or better)

**CHEM 4314 # IMMUNOLOGY** A study of the molecular and cellular mechanisms of immunity. Lab required. (Same as BIOL 4314) (Prerequisite: BIOL 2114)

**CHEM 4333 # INORGANIC CHEMISTRY II** Bonding models and reactions of inorganic, organometallic and coordination compounds. (Prerequisite: CHEM 2113 with a grade of C or better)

**CHEM 4553 # PHYSICAL CHEMISTRY I** Introductory course in modern theoretical chemistry (Co-requisites: MATH 2315 or equivalent, and 18 hours of chemistry)

**CHEM 4562 # ADVANCED LABORATORY** Physical and spectroscopic measurement on chemical systems. (Prerequisites: Thirty (30) hours of chemistry or permission of department)

**CHEM 4653 # PHYSICAL CHEMISTRY II** A continuation of CHEM 4553. (Prerequisites: CHEM 4553 and MATH 2315, or department approval)

**CHEM 4662 PHYSICAL CHEMISTRY I LABORATORY** Laboratory study of ideal gas law, enthalpy, entropy, calorimetry, and other thermodynamic concepts, including mathematical and instrumental methods.

**CHEM 4951 SENIOR SEMINAR** Required for all chemistry majors. Emphasis on career planning, research presentation, and program assessment. (Prerequisite: 30 hours of chemistry or departmental approval)

**CHEM 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: department approval)

**CHEM 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: department approval)

**CHEM 4980 SEMINAR** Small group study of topic announced by department (Prerequisite: department approval)

**CHEM 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: departmental approval)

**CHEM 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the professor. (Prerequisite: departmental approval)

**CHEM 5970 SPECIAL STUDIES** Individual project selected in consultation with the professor. (Prerequisite: departmental approval)

**CHEM 5980 SEMINAR** Small group study of topic announced by department (Prerequisite: department approval)

**CHEM 5990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: departmental approval)

**CHTW 1513 # CHOCTAW LANGUAGE AND CULTURE** This course provides a basic introduction to Choctaw language and culture

**CHTW 1613 # CHOCTAW LANGUAGE AND CULTURE II** Intermediate Choctaw is a semester Language course intended for students who have successfully completed Choctaw I Beginning course.

**CHTW 1713 # CHOCTAW LANGUAGE AND CULTURE III** This course is a continuation of Choctaw II. Emphasis is on idiomatic language and more complicated syntax. By the end of the semester, students are expected to negotiate the meaning of basic printed materials; produce clear and coherent prose; communicate orally in appropriate language with proper stress and intonation; and analyze and interpret various forms of spoken communication. (Prerequisite: CHTW 1613)

**CHTW 1813 # CHOCTAW IV** A continuation of Choctaw Language and Culture III with special attention to its phonology, morphology, and syntax. Advanced conversational practice, literacy (Choctaw language, reading and writing emphasis), vocabulary building, history and culture of the Choctaw Nation are also emphasized. (Prerequisite: CHTW 1713)

**CHTW 3003 # INTERMEDIATE CONVERSATIONAL CHOCTAW** This course requires some prior knowledge of Choctaw pronunciation, basic vocabulary and present, past and future tenses. More advanced grammar, vocabulary and cultural elements will be taught with an emphasis on enhancing the student's ability to express themselves orally in everyday life situations. (Prerequisite: CHTW 1513 or permission)

**CHTW 4003 # ADVANCED CONVERSATIONAL CHOCTAW** This course continues from Intermediate Choctaw in the development of speaking and writing with special emphasis on listening and speaking. Students will develop their grammatical skills with confidence and strengthen conversational skills through a variety of activities. (Prerequisite: CHTW 1513 or permission)

**CHTW 4980 # SEMINAR** Research a seminar of subject announced by department. Prerequisite: CHTW 1813 or permission

**CIS 1003 COMPUTERS IN SOCIETY** Provides an introduction to the role of computers in today's society. Basic issues concerning computers, such as legal and ethical, will be introduced and discussed. The course will involve a discussion of internet, data communications, and basic applications such as word processors and spreadsheets. (Does not count towards a major or minor in Computer Science or Computer Information Systems)

**CIS 1613 # COMPUTER INFORMATION SYSTEMS I** This course begins with a computer literacy component followed by an introduction to logic and the concept of computer programming. The practice of



critical thinking for problem solving will be introduced and cultivated. Data representation, machine decision making and repetitive tasking will be combined to create simple computer programs.

**CIS 1623 # COMPUTER INFORMATION SYSTEMS II** This course broadens and deepens the knowledge gained in CIS 1613. Visual object oriented language(s) will be used to write comprehensive computer programs that deal with a variety of realistic business applications. Emphasis on generally accepted principles of software development techniques will include construction of acceptable user interfaces, data handling, report generation and efficient throughput for large amounts of data. (Prerequisite: CIS 1613)

**CIS 2103 INTERMEDIATE PRODUCTIVITY SOFTWARE** This course will build on techniques introduced in Computers in Society (CIS 1003). Case-based examples of business and industry problems will be solved by utilizing integrated software packages. Critical thinking, problem analysis, decision making and data representation techniques will be strengthened. (Prerequisite: CIS 1003)

**CIS 2343 WEB PAGE PROGRAMMING** Basic concepts to design a web site. Included are content, navigation, graphics, and interactivity. HTML, internet programming, commercial domain licensing, development software, and effective layout. Students must maintain a web site. (Previously listed as TECH 2343 WEB PAGE DESIGN I)

**CIS 3003 USING COMPUTERS IN THE MEDICAL OFFICE** The course will teach students to prepare realistic medical documents such as (but not limited to) medical history reports, consultation letters, chart notes, invoices, payroll worksheets, and a variety of presentations using MicrosoftOffice or a similar integrated software package. There will also be an introduction to human anatomy and associated medical terminology.

**CIS 3103 ADVANCED PRODUCTIVITY SOFTWARE** This course reinforces the ability to solve comprehensive business and industry problems by utilizing advanced features of integrated software packages. Techniques not presented in earlier courses, such as (but not limited to) macro design, pivot and data tables, form design, desktop publishing, web application integration, use of embedded object-oriented programming languages, applications of advanced presentation techniques and scenario management will be covered (Prerequisite: CIS 2103)

**CIS 3123 INTERMEDIATE DATABASE ANALYSIS** This course introduces the concepts of database structures and accepted methods of storing various collections of data. A commercially available database package accepted by the business community will be utilized as the learning platform. Realistic case studies will be used to illustrate the fundamental theories and reinforce understanding of problem solution and usage of critical thinking skills.

**CIS 3223 NET-CENTRIC COMPUTING** The study of how data is communicated from one computer to another including such topics as local area networks, network design, distributed processing, and telecommunication management. (Prerequisite: CS 1613 or CIS 1613)

**CIS 3323 ADVANCED DATABASE ANALYSIS** Advanced database concepts such as custom reports generated by SQL, relational tables, integration of databases with web site interfaces, and compatibility issues with current internet programming platforms. Several commercially available database systems in use will be utilized for the solution of complex and comprehensive business and industry case studies (Prerequisite: CIS 3123) Same as CS 3323

**CIS 3533 ADVANCED BUSINESS SOLUTIONS** This course develops advanced topics in business case study using application software to solve managerial problems. The cases present students with managerial decision-making activities, ranging from basic problem-solving situations to more advanced problem-solving situations. Each case encourages use of student's knowledge, creativity and software skills to solve real managerial problems. Case utilize and enhance spreadsheet, database, web page development and integration skills. (Prerequisite CIS 2103)

**CIS 3543 COMPUTER SECURITY** Protecting computer resources from unauthorized access, establishing control to ensure the reliability of information processing, and auditing information systems to verify the accuracy of information systems.

**CIS 4103 # COMPUTER ETHICS** An overview of the ethical use of computer systems and data for the professional. Topics covered will include privacy, property rights, accountability and Internet issues as well as codes of ethics and professional conduct as published by technical organizations.

**CIS 4113 DATA COMMUNICATIONS TECHNOLOGY** This course covers principles of signal theory, communications protocols, current software designs, topology and how wireless and other new technologies such as usage of Bluetooth, highly elliptical-orbiting satellites and code multiplexing are changing the industry's adaptation of available technologies. Leading edge communications trends will be addressed, especially those pertaining to internet applications using wire, radio, light and other electromagnetic methods. New developments unknown at the time of this publication will be injected into the subject matter.

**CIS 4343 APPLIED NET-CENTRIC COMPUTING** This course focuses on integrating the class knowledge in computer science and internet technology together and applying those skills in local/wide area networks and virtual private network. Topics include: web technologies, network architecture, protocols, applications, management, and security. In addition, the network hands-on projects for students will include: configuring network services/servers such as DNS, DHCP, NATP, Firewall, TELNET, FTP, SSH, Email, Newsgroup, Database, and Web Servers, implementing the Network File System and Network Information System, sharing resources between Unis/Linus and Windows network systems and developing a Three-tier Database-driven on-line E-Commerce application. (Prerequisite CIS 3223)(Prerequisite CIS 3223 or CS 3223)

**CIS 4413 SYSTEMS ANALYSIS** Producing quality software on time and under budget that meets all user requirements through the software life cycle techniques. Cost estimation, project management, testing, and maintenance are stressed. (Prerequisite: 90 hours toward a baccalaureate degree) (Same as CS 4413)

**CIS 4423 SOFTWARE ENGINEERING** Practical application of systems software development using techniques learned in previous courses. Should be taken toward the end of a student's academic training. (Prerequisite: CIS 4413) (Same as CS 4423)

**CIS 4613 HEALTH INFORMATION SYSTEMS** An introduction to the fundamentals of health information management using computer-based patient records. Key areas of study within health information management are addressed, with emphasis on the use of information as an asset to the health care provider. Included topics illustrate the importance of planning and setting procedures for proper storage, maintenance, usage, and security of health information records.

**CIS 4623 ELECTRONIC HEALTH RECORDS** This course introduces health information technology and develops the skills necessary to become successful users of medical practice management software. It prepares students to go into any medical office and perform medical practice management duties with the same or similar software as used in this course.

**CIS 4960 DIRECTED READING** (Prerequisite: permission of the department)

**CIS 4970 SPECIAL STUDIES** (Prerequisite: permission of the department)

**CIS 4980 SENIOR SEMINAR** In this course students refine job search skills by developing a resume and cover letter. Students also complete a career development application and job search. Selected readings in career development will be assigned and discussed. In addition, students are expected to demonstrate knowledge in major fields through performance of research and writing and assessment testing. (Prerequisite: permission of the department)

**CIS 5103 COMPUTER ETHICS** An overview of the ethical use of computer systems and data for the professional. Topics covered will include privacy, property rights, accountability and Internet issues as well as codes of ethics and professional conduct as published by technical organizations.

**CIS 5113 DATA COMMUNICATIONS TECHNOLOGY** This course covers principles of signal theory, communications protocols, current software designs, topology and how wireless and other new technologies such as usage of Bluetooth, highly elliptical-orbiting satellites and code multiplexing are changing the industry's adaptation of available technologies. Leading edge communications trends will be addressed, especially those pertaining to internet applications using wire, radio, light and other electromagnetic methods. New developments unknown at the time of this publication will be injected into the subject matter. (Prerequisite: departmental approval)

**CIS 5343 APPLIED NET CENTRIC COMPUTING** This course focuses on integrating the class knowledge in computer science and internet technology together and applying those skills in local/wide area networks and virtual private network. Topics include: web technologies, network architecture, protocols, applications, management, and security. In addition, the network hands-on projects for students will include: configuring network services/servers such as DNS, DHCP, NATP, Firewall, TELNET, FTP, SSH, Email, Newsgroup, Database, and Web Servers, implementing the Network File System and Network Information System, sharing resources between Unis/Linus and Windows network systems and developing a Three-tier Database-driven on-line E-Commerce application. (Prerequisite CIS 3223)

**CIS 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the student's graduate advisory committee. (Prerequisite: department approval)

**CIS 5970 SPECIAL STUDIES** Individualized project selected with the advice of the student's graduate advisory committee. (Prerequisite: department approval)

**CIS 5980 SEMINAR** Small group study of topic announced by department (Prerequisite: department approval)

**CIS 5990 RESEARCH FOR MASTER'S THESIS** Independent investigation designed in consultation with the student's graduate advisory committee. (Prerequisite: department approval)

**CJ 2533 INTRODUCTION TO CRIMINAL JUSTICE** An examination of the historical development and contemporary practices related to the major components of the criminal justice system; law enforcement, the courts, and corrections.

**CJ 3113 # POLICING IN THE UNITED STATES** This course is a critical overview of policing and current issues that relate to the law enforcement in the U.S. (Prerequisite: CJ 2533)

**CJ 3123 # LAW AND THE LEGAL SYSTEM** This course is an introduction to the current legal system, both criminal and civil. The course will focus on the historical development of the U.S. legal system and introduce students to the legal requirements of our system of justice. (Prerequisite: CJ 2533)

**CJ 3133 # INTRODUCTION TO US CORRECTIONS** This course is a study of the historical development of the correctional system and a complete analysis of the system. Topics included are the prison community, effects of incarceration, rehabilitative efforts and community treatment strategies. (Prerequisite: CJ 2533)

**CJ 3323 CRIMINAL INVESTIGATIONS AND FORENSICS** Criminal investigation procedures including case preparation, specific techniques for specific offenses and crime science. (Prerequisite: CJ 2533)

**CJ 3333 ADMINISTRATION OF CRIMINAL JUSTICE** This course is the study of administration and organization of the major components of the criminal justice system: law enforcement, corrections, juvenile justice, and the courts. (Prerequisite: CJ 2533)

**CJ 3343 VICTIMOLOGY** A historical and contemporary examination of crime and how victims are treated in contemporary society. (Prerequisite: CJ 2533)

**CJ 3433 CRIMINAL LAW AND PROCEDURES** This course is an examination of statutory criminal law and its application to law enforcement and the criminal courts in the United States. (Prerequisite: CJ 2533)

**CJ 4253 CONTEMPORARY ISSUES IN POLICING** An examination of current issues in policing. Topics include areas of selection and recruitment of officers, philosophies and strategies of policing, management and operations of police departments, and misconduct and accountability of police. (Prerequisite: CJ 2533)

**CJ 4260 INDEPENDENT STUDY IN CRIMINAL JUSTICE** A current review of scientific literature in one of the areas of criminal justice; policing, legal systems, corrections of juvenile justice. (Prerequisites: CJ 2533, SOC 4333)(Variable hours 1-4)(instructor permission required)

**CJ 4283 CORRECTIONAL LAW** An examination of the laws governing the field of corrections from both the inmates and correctional employees point of view. (Prerequisite: CJ 2533)

**CJ 4333 CAPSTONE IN CRIMINAL JUSTICE** This course is an in-depth, comprehensive research project designed to provide students the accumulation of the criminal justice program. (Prerequisites: CJ 2533, SOC 4333, CJ 3113, CJ 3123, CJ 3133, SOC 3523, SOC 3033, SOC 3123, 9 elective hours)

**CJ 4403 COMPARATIVE CRIMINAL JUSTICE SYSTEMS** This course is an analysis of differing criminal justice systems across nation-states. (Prerequisite: CJ 2533)

**CJ 4440 INTERNSHIP IN CRIMINAL JUSTICE** Work experience in a criminal justice setting with a focus on connecting criminal justice theory to actual work experience. (Variable hours 1-4; 40 hrs of work for each hour of credit)(Prerequisites: CJ 2533, SOC 4333)(Instructor permission required)

**CJ 4543 ADVANCED CRIMINOLOGICAL THEORY** An in-depth examination of contemporary criminological theory with hands-on statistical analysis. (Prerequisites: CJ 2533, SOC 4333)

**CJ 4970 SPECIAL STUDIES** Special study of selected sociological topics. (Prerequisite: consent of instructor)

**CLAR 1510 CLARINET LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**CLAR 2510 CLARINET LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**CLAR 3510 CLARINET UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**CLAR 4510 CLARINET UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**COMM 1003 VOICE & DICTION** Trains the student to isolate and reproduce each sound in the English language. Uses practical situations to emphasize a more effective speaking voice.

**COMM 1013 # SURVEY OF COMMUNICATION** This course will provide students the foundational principles that champion the communication studies discipline. More specifically, this course will survey theory and practice in the following areas: intrapersonal, interpersonal, organizational, group, media and ethics, and public communication.

**COMM 1153 DESKTOP PRESENTATIONS** This course shows students how to combine creative thinking and the latest in electronic publishing devices to create media presentations.

**COMM 1233 # INTERPERSONAL COMMUNICATION** Gives a thorough introduction to the field of interpersonal communication. Shows the student how to apply these principles to everyday interactions.

**COMM 2113 WRITING FOR MASS COMMUNICATION** Theory and practice of gathering, writing, and evaluating information for dissemination through mass communication channels, both print and electronic. (Prerequisite: minimal word processing skills)

**COMM 2213 # BUSINESS & PROFESSIONAL SPEAKING** Students perform a variety of speeches and learn organization, research, structure and delivery techniques. Students learn conference techniques and interviewing skills.

**COMM 2223 MULTIMEDIA JOURNALISM** This course introduces students to reporting, writing and creating multimedia journalism for digital platforms. Students will learn to create online story packages: planning, pitching, reporting and editing, and determining the best use of multimedia and visual communication. Students will utilize essential techniques to produce packages for the online edition of The Southeastern, and other departmental media outlets. (Prerequisite: COMM 2113)

**COMM 2233 # FUNDAMENTALS OF ORAL INTERPRETATION** Focuses on the ability to transfer the author's meaning from the printed page to the audience's mind. Units on poetry, prose, and dramatic literature are included. (Same as THTR 2233)

**COMM 2243 PUBLICATION PRODUCTION AND DESIGN** Fundamentals of publication design and layout as they apply to the production and editing of the University's student publications.

**COMM 2253 # MEDIA AND SOCIETY** This course will survey the history, structure, aesthetic qualities, and cultural influence of the major forms of mass media. This includes an examination of television, motion pictures, radio, the recording industry, magazines, print journalism, multi-media, and social networking. Emphasis will be placed upon the ways in which the media and society influence and change each other.

**COMM 2563 # COMMUNICATION LEADERSHIP** This course introduces the communication concepts that are central to effective leadership. Additionally, this course examines competing perspectives concerning how leadership should be enacted in various communication environments.

**COMM 2573 AUDIO PRODUCTION** This is an introductory level course in audio production for both broadcast and non-broadcast applications. This course provides an overview of digital non-linear editing and radio station operations. The theories, tools, techniques, and regulatory controls of audio production are examined. Students are required to complete laboratory activities for this course.

**COMM 2583 PRINCIPLES OF PUBLIC RELATIONS AND ADVERTISING** This course is an introduction to message development in strategic integrated communication practices. Students will explore strategy, tactics, and evaluation efforts, as well as ethical principles, social responsibilities and professional aspects of public relations and advertising.

**COMM 3113 # COMMUNICATION THEORY AND RESEARCH** This course is an introduction to theory and research in the field of communication with an emphasis on interpersonal, public rhetoric, and mass media communication.

**COMM 3223 EDITING IN PRINT MEDIA** Theory and practice in editing, copy writing, layout and design of print media publications with emphasis on newspapers. (Prerequisites: COMM 1013 and 2113, or permission of instructor)

**COMM 3233 FEATURE WRITING** Techniques of feature writing, writing leads and structuring and polishing the feature story of the unusual or dramatic situation, determining news values and writing different types of stories. (Prerequisites: COMM 2113 or permission of instructor)

**COMM 3243 EDITORIAL WRITING** A study of the entire process of creating an editorial page--from the editorial conference to the letters column where readers have their say. A study of views and open expression to preconceptions and prejudices. (Prerequisites: COMM2113 or permission of instructor)

**COMM 3273 # HEALTH COMMUNICATION** This course focuses on the role of communication in shaping professional health care messages and public acceptance of these messages. The course provides instruction of the development and use of health-related and care-related messages and media; the goals and strategies of health care promotion; relationships, roles, situations, and social structures within the context of health maintenance and promotion; and applications to disease prevention, health advocacy and communications concerning treatments.

**COMM 3283 VISUAL COMMUNICATION** This course explores the creation, use and critique of visual communications for journalistic and public relations purposes in print and web-based media. Topics include: digital storytelling using video and still images, technical and compositional elements, digital processing, and ethics related to image manipulation. Students will analyze visual communication from rhetorical, cultural, and ethical perspectives.

**COMM 3313 # GREAT SPEECHES OF THE 20TH CENTURY** A study of 20th Century public discourse on the ideas and issues of politics, gender, culture and history of the United States. This study includes presidential, civil rights, and women's movement rhetoric. This course emphasizes the rhetoric of liberalism and conservatism. Includes a comprehensive study of great American speeches. (Prerequisite: COMM 2213 or permission of instructor)

**COMM 3323 # GROUP DISCUSSION** Includes how groups are formed, why they are formed, how leadership develops and what leads to the dissolution of groups.

**COMM 3333 # CONFLICT MANAGEMENT** Conflict management is an examination of conflict as a communication phenomenon. Conflict is something that people create and shape as they interact with each other. Thus, this course focuses on the communication dynamics involved in understanding and managing conflict, no matter what form it takes. Completing this course will give you an understanding of how theory and research can be used to understand and influence conflict dynamics in everyday life.

**COMM 3413 # COMMUNICATION IN POPULAR CULTURE** This course is a study of communication influences inherent in American popular culture. Students will explore race, gender, and sexuality while examining the everyday messages embedded in discourse central to entertainment, social movements, politics, and sports.

**COMM 3453 # POLITICAL COMMUNICATION** An investigation of the processes political candidates and the mass media employ to generate and disseminate political narratives. This course considers the impact of the mass media, especially television, on political power and consciousness in the United States. Particular emphasis on political campaigning.

**COMM 3463 # THEORIES OF PERSUASION** This course introduces the theory and practice of persuasive communication. Students will enhance message-construction skills as well as critical thinking skills. This study emphasizes interpersonal influence, group leadership and power, negotiation strategies, political communication and propaganda. (Prerequisite: COMM 2213 or permission of instructor)

**COMM 3543 # ARGUMENTATION AND ADVOCACY** A study of theory, research and practice in developing and presenting arguments on public policy and legal issues. This course emphasizes reasoning skills and sound communicative strategies. (Prerequisite: COMM 2213 or permission of instructor)

**COMM 3553 BROADCAST ANNOUNCING** This is a course in both theory and practice of broadcast announcing. Designed to familiarize students with the requirements of a variety of broadcast announcing situations. Students are required to complete laboratory requirements for this course. (Prerequisite: COMM 2573 or permission of instructor)

**COMM 3573 VIDEO PRODUCTION** This is an introductory level course in video production for both broadcast and non-broadcast applications. This course provides an overview of digital non-linear editing, video, composition, and field production. Students are required to complete laboratory activities for this course. (Prerequisite: COMM 2573 or permission of the instructor).

**COMM 3663 BROADCAST AND CABLE PROGRAMMING** Theories and strategies of program selection, scheduling and evaluation for broadcast stations and cable television systems. Audience psychology and principles of audience analysis. Examination of methods for determining characteristics of greatest program appeal to a desired audience. Examination of program types, ratings, and program selection. (Prerequisites: COMM 2573 and COMM 3573 or permission of the instructor)

**COMM 3753 # INTRAPERSONAL COMMUNICATION** This course provides students with materials, suggestions, and explorations for using concepts learned about human communication. The student will develop a vocabulary, define own terms, and find those concepts that are real to them. (Prerequisite: COMM 1233 or permission of instructor)

**COMM 3773 ADVERTISING COPYWRITING AND DESIGN** The student will explore the creative process of copywriting and advertising design.

**COMM 3783 BROADCAST NEWSWRITING** Introduction to the various styles of writing news and non-news material for presentation on radio, television, and cable. Familiarize students with the structure and function of broadcast journalism. Examines theoretical and practical aspects of broadcast journalism. Students are required to complete laboratory activities for this course. (Prerequisite: COMM 2573 or permission of instructor)

**COMM 3883 # ORGANIZATIONAL COMMUNICATION** The role of the person in the organization will be emphasized. Understanding the role of communication in the world of work is a high priority in industry today.

**COMM 3893 COMMUNICATION CAMPAIGNS AND CASE STUDIES** Using actual campaigns and events as models, this course examines the development of public relations strategies along with the tactical communications and actions that were instituted to achieve organizational goals.

**COMM 4333 # RISK AND CRISIS COMMUNICATION** Through a message-centered approach, this course introduces students to the planning, creation, deployment and critique of risk and crisis communication. Students will explore competing theoretical perspectives and rhetorical strategies used when conveying risk and crisis communication to the public.

**COMM 4343 # COMMUNICATION TRAINING AND DEVELOPMENT** A study of the theoretical and practical issues involved in developing and implementing communication training and development programs. Emphasis is given to identifying, assessing, and improving communication competencies.

**COMM 4433 # INTERCULTURAL COMMUNICATION** This course focuses on the key concepts of communication and culture covering such topics as barriers in intercultural communication; dimensions of culture; multiculturalism, women, family and children; and culture's influence on perception. It will help students build communication skills with particular emphasis on crossing cultural barriers through student activities.

**COMM 4443 # COMMUNICATION CRITICISM** This course introduces the methodologies available to examine communication artifacts. This study emphasizes the critical abilities necessary to describe, explain, analyze, and evaluate speeches, advertising, songs, art, film, and television.

**COMM 4463 # FREEDOM OF SPEECH** Analysis of contemporary debate concerning the First Amendment guarantee of freedom of speech and the proper limits to expression. Major topics include, but are not limited to, artistic expression, hate speech, subversive speech, nonverbal expression, and technology.

**COMM 4533 LANGUAGE DEVELOPMENT & DISORDERS** An introductory course focusing on both language development and barriers to effective communication. Units on cleft palate, stuttering, articulation errors and hearing difficulties are included.

**COMM 4553 ONLINE VIDEO** This course explores online video and its use in various social, educational, and workplace settings. Assignments will include development, creation, and analysis of an online video brand and accompanying content on web and various social media platforms to support that brand. Previous video production experience is not required.

**COMM 4573 BROADCAST WORKSHOP** This is an advanced level course in both audio and video production for both broadcast and non-broadcast applications. This course will utilize real-world assignments to provide additional development in all aspects of audio and videoproduction. Students are required to complete laboratory activities for this course. (Prerequisite: COMM 2573 and 3573, or permission from the instructor).

**COMM 4613 # RHETORIC** This course provides a timely concentration on rhetorical principles which will allow the student to develop elevated skill levels in the areas of the written and spoken word. Beneficial to students preparing for entrance exams into professional and/or graduate schools and/or for entry into the workplace; extra emphasis will be placed upon the spoken word and the development of language with students receiving special critique and mentoring. (Prerequisites:ENG 1113, ENG 1213, COMM 2213)

**COMM 4773 ELECTRONIC MEDIA MANAGEMENT** Examines the management principles and practices in the broadcasting and cable industry. Examines the legal, financial, and technical aspects of broadcast stations and cable television systems. Theory and practicum. (Prerequisite: COMM2573)

**COMM 4853 # FIRST AMENDMENT STUDIES** This course explores the contemporary debate concerning the First Amendment guarantee of freedom of speech and the proper limits to expression. Major topics include subversive speech, nonverbal expression, artistic expression, as well as libel, slander, obscenity, copyright and cyberspace.

**COMM 4893 ADVERTISING SALES** This course deals with the various theories and advertising skills needed for media sales. Students create and sell advertising on campus and off campus for organizations and businesses.

**COMM 4920 COMMUNICATION PRACTICUM** An intensive field experience that provides application of theory and principles developed in the classroom in an on-campus position under supervision of a professional. (Repeatable up to a maximum of three hours credit.)

**COMM 4940 COMMUNICATION INTERNSHIP** The internship is an intensive field experience that provides application of theory and principles developed in the classroom in an off-campus position under supervision of a professional. (Repeatable up to a maximum of three hours credit.)

**COMM 4960 DIRECTED READING** Subject named in title listing. (Prerequisite: permission of the instructor)

**COMM 4970 SPECIAL STUDIES** Subject named in title listing. (Prerequisite: permission of the instructor)

**COMM 4980 SEMINAR** Subject named in title listing. (Prerequisite: permission of the instructor)

**COMM 4990 RESEARCH** Subject named in title listing. (Prerequisite: permission of the instructor)



**COMM 5113 STRATEGIC COMMUNICATION** Students will learn theory and processes for planning, executing, and evaluating strategic communication consistent with the organization's mission and initiatives. This course emphasizes strategic communication deployed for both for-profit and non-profit organizations, to internal and external audiences, using proactive and reactive message strategies.

**COMM 5123 CRISIS COMMUNICATION** A clear and persuasive communication strategy is necessary during a crisis episode. This course focuses on ways to communicate effectively when organizations experience threats to their identity, reputation, or security. Students will apply effective crisis communication strategies, emphasizing practical application of theories, strategies, and tactics.

**COMM 5323 GROUP DISCUSSION** Includes how groups are formed, why they are formed, how leadership develops and what leads to the dissolution of groups.

**CONS 1111 # FISH AND WILDLIFE SCIENCE ORIENTATION** An orientation course for the incoming Fish and Wildlife Science major. A lecture and seminar format that covers skills to succeed as a student and be a competitive job candidate upon graduation.

**CONS 1124 # CONSERVATION OF NATURAL RESOURCES** The study of the dependence of the human population upon natural resources.

**CONS 2224 FUNDAMENTALS OF SOIL SCIENCE** Principal and biological properties of soils in relation to plant growth; soil production; and land use. With laboratory. (Prerequisite: CHEM 1315 or CHEM 1114)

**CONS 2323 WILDLIFE CONSERVATION** Requirements and values of wildlife resources. History of wildlife conservation. (Prerequisites: BOT 2114, CONS 1124, ZOOL 2114)

**CONS 3623 SOIL MANAGEMENT AND CONSERVATION** Principals of soil management with emphasis on improvement and maintenance of soil productivity. With laboratory. (Prerequisite: CONS 2224)

**CONS 3924 RANGE MANAGEMENT** Grazing and livestock management on native range lands. With laboratory. (Prerequisite: BOT 4214)

**CONS 4224 TECHNIQUES IN FISHERIES AND WILDLIFE MANAGEMENT** Techniques used to evaluate fisheries and wildlife resources, as well as methods of habitat assessment. With laboratory. (Prerequisites: CONS 1124, BIOL 3414)

**CONS 4523 # ENVIRONMENTAL POLICY AND LAW** Examination and analysis of important statutory laws, case laws, and administrative policies relating to the regulation of the environment and wildlife by state and federal agencies. Topics discussed will include pollution control, environmental impact assessment, endangered species, public lands, and wildlife law. (Prerequisite:CONS1124)

**CONS 4534 # LIMNOLOGY** Physical, chemical factors affecting the biology of ponds, reservoirs, streams. With laboratory. (Prerequisites: BIOL 3414)

**CONS 4634 FISHERIES MANAGEMENT AND CULTURE** Methods of managing exploited wild fish populations and rearing fish under controlled or semicontrolled conditions. With lab. (Prerequisites: BIOL 3414, ZOOL 4334)

**CONS 4644 COMMERCIAL WILDLIFE PRODUCTION** Methods of breeding, feeding, marketing, and potential uses of wild animals. (Prerequisites: CONS 1124, BIOL 3414)

**CONS 4723 MANAGEMENT OF FISHERIES AND WILDLIFE RESOURCES** Synthesis course in the management of fisheries and wildlife resources that discusses how the biological basis of conservation is influenced by law, culture, social acceptability, and economic feasibility. (Prerequisites: CONS 1124,BIOL 3414)

**CONS 4823 ENVIRONMENTAL IMPACT ASSESSMENT** Analysis of the National Environmental Policy Act and the consequences of its implementation; methods used in environmental impact assessment; writing environmental impact statements; assessment of human activity on the abiotic and biotic environment, as well as the cultural, economic, and social dimensions of the environment. (Prerequisite: CONS 4523)

**CONS 4862 INTRODUCTION TO GIS** An introduction to the Geographic Information Systems (GIS) and their application. Students will learn the history, background, and justification of GIS, and will learn methods and analysis using GIS technology. Classes will consist of lecture and lab exercises that demonstrate mastery of basic GIS skills.

**CONS 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**CONS 4970 SPECIAL STUDIES** Study of individual problems in Conservation. (Prerequisite: 20 hours of Biological Sciences and permission)

**CONS 4980 SEMINAR** Study and discussion of problems in Conservation. (Prerequisite: 20 hours of Biological Sciences)

**CONS 4990 RESEARCH** Methods of research, current literature, and research in conservation. (Prerequisite: 20 hours of Biological Sciences and permission)

**CONS 5224 TECHNIQUES IN FISHERIES AND WILDLIFE MANAGEMENT** Techniques used to evaluate fisheries and wildlife resources, as well as methods of habitat assessment. With laboratory. (Prerequisites: CONS 1124, BIOL 3414)

**CONS 5523 ENVIRONMENTAL POLICY AND LAW** Examination and analysis of important statutory laws, case laws, and administrative policies relating to the regulation of the environment and wildlife by state and federal agencies. Topics discussed will include pollution control, environmental impact assessment, endangered species, public lands, and wildlife law.

**CONS 5534 LIMNOLOGY** Physical, chemical and biological factors influencing streams, rivers, lakes, ponds, and watersheds. Lab required. (Prerequisites: BIOL 3414)

**CONS 5553 POPULATION BIOLOGY** Principles and theories of the structure and dynamics of natural populations including their ecological, genetic, and evolutionary organization. (Prerequisite: B.S. or B.A. in Biology, Conservation, or related field)

**CONS 5723 MANAGEMENT OF FISHERIES AND WILDLIFE RESOURCES** Synthesis course in the management of fisheries and wildlife resources that discusses how the biological basis of conservation is influenced by law, culture, social acceptability, and economic feasibility. (Prerequisites: CONS 1224, BIOL 3414)

**CONS 5823 ENVIRONMENTAL IMPACT ASSESSMENT** Analysis of the National Environmental Policy Act and the consequences of its implementation; methods used in environmental impact assessment; writing environmental impact statements; assessment of human activity on the abiotic and biotic environment, as well as the cultural, economic, and social dimensions of the environment. (Prerequisite: one gen educ or introductory course in Biology and one gen educ or introductory course in the Phys Scie area)

**CONS 5862 INTRODUCTION TO GIS** An introduction to the Geographic Information Systems (GIS) and their application. Students will learn the history, background, and justification of GIS, and will learn methods and analysis using GIS technology. Classes will consist of lecture and lab exercises that demonstrate mastery of basic GIS skills. For graduate credit, student is required to write a paper on how they intend to use GIS in their independent research.

**CONS 5920 PROBLEMS IN CONSERVATION** Independent study designed in consultation with the professor. (Prerequisite: 15 hours of Biological Sciences and permission)

**CONS 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the professor. (Prerequisite: 15 hours of Biological Sciences and permission)

**CONS 5970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: 15 hours of Biological Sciences and permission)

**CONS 5980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 15 hours of Biological Sciences and permission)

**CONS 5990 RESEARCH** Independent investigation designed in consultation with the professor. Limited to a maximum of six credit hours. (Prerequisite: 20 hours of Biological Sciences and permission)

**COUN 5123 SCHOOL COUNSELING ORIENTATION AND ETHICAL PRACTICE** This course introduces studies that provide an overview of historical, contemporary, clinical, and training issues in the practice of school counseling. The course also provides information related to the following aspects of school counseling practice: (a) professional roles and responsibilities; (b) professional organizations; (c) state and national credentialing; and (d) counselor advocacy and self-care. Lastly, the student will be provided with an in depth understanding of the current version of the American Counseling Association Code of Ethics and state-level school counselor certification and corresponding regulations. (Prerequisite: Permission required)

**COUN 5133 CMHC ORIENTATION & ETHICAL PRACTICE** This course introduces studies that provide an overview of historical, contemporary, clinical, and training issues in the practice of clinical mental health counseling. The course also provides information related to the following aspects of clinical mental health counseling practice:(a) professional roles and responsibilities; (b) professional organizations; (c) state and national credentialing; and (d) counselor advocacy and self-care. Lastly, the student will be provided with an in-depth understanding of the current version of the American Counseling Association Code of Ethics and state professional counselor licensing act and regulations (Prerequisite: permission required)

**COUN 5243 HUMAN GROWTH AND DEVELOPMENT IN COUNSELING** This course introduces studies that provide an understanding of the nature and needs of persons at all developmental levels and in diverse cultural contexts. This course also provides a systematic study of human development emphasizing physical, personality, cognitive, moral, and psychosocial developmental theories and issues, with an emphasis on facilitating optimal development and wellness over the lifespan. (Prerequisite: permission required)

**COUN 5283 ASSESSMENT IN COUNSELING** This course introduces studies that provide an understanding of individual and group approaches to assessment and evaluation in a culturally diverse society. This course also provides an understanding of assessment in counseling through (1) an overview of basic counseling assessment concepts, (2) an understanding of test construction, (3) familiarity with instruments, and (4) an overview of test interpretation. It also provides a discussion of typical problems and approaches to individual and group testing in the area of intelligence, aptitude, achievement, interest, and personality measurement. History, rationale, and ethical issues in the use of counseling assessment instruments are included.(Prerequisite: permission required)

**COUN 5323 CAREER COUNSELING AND DEVELOPMENT** This course introduces studies that provide an understanding of career development and related life factors. This course also provides an overview of career development theories, program planning, educational planning, assessment techniques, and applied career counseling processes, including those applicable to specific populations in a global economy. (Prerequisite: permission required)

**COUN 5333 INDIVIDUAL INTELLIGENCE TESTING IN COUNSELING** This course provides an overview of the use of a variety of standardized intelligence tests with an emphasis of history, validity, reliability, administration, and interpretation issues surrounding the use of this branch of counseling assessment. (Prerequisite: COUN 5283, permission required)

**COUN 5343 PERSONALITY ASSESSMENT IN COUNSELING** This course provides an overview of the use of a variety of standardized personality tests, with an emphasis on history, validity, reliability, administration, and interpretation issues surrounding this branch of counseling assessment. (Prerequisite: COUN 5283, permission required)

**COUN 5373 PSYCHOPATHOLOGY AND TREATMENT PLANNING IN COUNSELING** This course offers a study of the principles of understanding dysfunction in human behavior and social disorganization. Included in this course is an exploration of etiology, classification, differential diagnosis, and prognosis issues surrounding the full spectrum of mental health disorders in a culturally diverse society. Also, included is an overview of record keeping and treatment planning strategies required of today's mental health marketplace. (Prerequisite: permission required) (Previously listed as Counseling Diagnosis & Treatment Planning)

**COUN 5423 COUNSELING PRE-PRACTICUM** This course provides an overview of the basic counseling skills used by the professional counselor in working with children, adolescents, and adults. Included is a laboratory experience in which the student is trained in the application of counseling relationship-building and working-stage skills via role-play activities with other students in the class. (Prerequisite: Full admission to the Clinical Mental Health or School Counseling graduate programs; Permission required)

**COUN 5443 THEORIES OF COUNSELING** This course examines contemporary and alternative counseling theories that provide the student with models to conceptualize client presentation and that help them apply appropriate counseling interventions. Students will be exposed to models of counseling that are consistent with current professional research and practice in the field so they may begin to develop a personal model of counseling. (Prerequisite: permission required)

**COUN 5483 SOCIAL AND CULTURAL DIVERSITY ISSUES IN COUNSELING** This course includes studies that provide an understanding of the cultural context of relationships, issues, and trends in a culturally diverse society. Also included is an overview of social and cultural theories, strategies, and roles to be applied by the pluralistic counselor to establish an environment for optimal client wellness and successful counseling outcomes. (Prerequisite: permission required)

**COUN 5503 CRISIS AND DISASTER COUNSELING** This course provides an overview of crisis and disaster intervention strategies for the professional counselor. Issues addressed include, but are not limited to, crisis of suicide, homicide, grave disability due to a mental illness, domestic violence, school violence, posttraumatic stress disorder, and vicarious trauma. The counselor's role in natural and human disaster intervention is also addressed. (Prerequisite: permission required)

**COUN 5523 GROUP COUNSELING** This course includes studies that provide both theoretical and experiential understandings of group purpose, development, dynamics, theories, methods, skills, and other group approaches in a culturally diverse society. Issues of group counseling leadership, stages, skills, methods, and ethics issues are also examined. (Prerequisite: Full admission to the Clinical Mental Health or School Counseling graduate program; permission required; Co-requisite: COUN 5530)

**COUN 5530 GROUP COUNSELING LABORATORY EXPERIENCE** This laboratory experience provides direct experiences in which students participate as group members in a small group activity, approved by the program, for a minimum of 10 clock hours over the course of one academic term. (Prerequisite: permission required; Corequisite: COUN 5523)

**COUN 5543 COUNSELING PRACTICUM** This course involves intensely supervised practice of professional counseling at a field site in the community. For this practicum experience, students provide a variety of individual, group, marriage, couple, and family counseling direct service activities to field-based clients. Students are required to complete a minimum of 100 hours of counseling-related services, 40 of which must include direct client contact activities (Prerequisites:COUN 5123 or COUN 5133,depending on student's major, COUN 5423 with a grade of B or higher, and COUN 5443; permission required)

**COUN 5563 MARRIAGE, COUPLE, AND FAMILY COUNSELING** This course provides the student with an overview of the knowledge, skills, and practices necessary to address a wide variety of issues in the context of relationships and families. Historical, theoretical, and developmental issues in systems counseling are addressed, in addition to introducing the student to the basic skills of marriage, couple, and family counseling. (Prerequisite: permission required)

**COUN 5573 PSYCHOPHARMACOLOGY IN COUNSELING** This course provides an overview of commonly prescribed psychotropic medications in the field of professional counseling. The course assists the counselor in understanding his or her role in working with medical professionals in the concurrent treatment of mental health issues using an interdisciplinary approach. Also addressed in this course are medications and drugs of abuse included in the substance-related disorders section of the most current version of the Diagnostic and Statistical Manual of Mental Disorders. (Prerequisite: permission required)

**COUN 5583 DEVELOPMENTAL SCHOOL COUNSELING** This course is the foundation for students planning to enter the school counseling profession. Special attention is given to the foundations and contextual dimensions of school counseling as well as the knowledge and skill requirements such as organization, planning, implementation, management and evaluation of a comprehensive school counseling program (Prerequisite: permission required)

**COUN 5593 SUBSTANCE USE AND PROCESS ADDICTION COUNSELING** This course provides an overview of assessment and treatment methods available for clients and their family members struggling with the full spectrum of substance use disorders or process addiction issues (e.g.,gambling, sex, Internet,pornography addiction, etc.)(Prerequisite: permission required) (Previously listed as Substance & Behavioral Addiction Counseling)

**COUN 5613 COUNSELING CHILDREN AND ADOLESCENTS** This course provides instruction in the theories and techniques used in counseling children and adolescents. Also provided is specific instruction on conceptualization of childhood and adolescent problems with emphasis on age- and developmentally-appropriate interventions. Focus is directed toward wellness-based developmental, as well as remedial counseling approaches, with accompanying skill development. (Prerequisite: permission required)

**COUN 5623 HUMAN SEXUALITY IN COUNSELING** This course focuses on sexual development and educational issues as applied to the field of professional counseling. Major emphases are placed upon becoming comfortable with one's own sexuality, assisting parents with providing sexual education to their children, providing education with regard to sexual matters, and diagnosing and treating sexual dysfunction. (Prerequisite: permission required) .)

**COUN 5633 GRIEF COUNSELING** This course addresses the mental health, social, and cultural manifestations of grief arising from bereavement, along with counseling interventions. Course content also covers characteristics of grief throughout the life cycle, as well as, age-appropriate interventions. Course readings, class discussions, exercises, and assignments are designed to examine issues related to loss events, grief, and bereavement from academic, personal, and professional points of view.(Prerequisite: permission required)

**COUN 5643 RELIGIOUS AND SPIRITUAL ISSUES IN COUNSELING** This course provides an introduction to studies related to the matters of religion and spirituality and their overlap with the delivery of professional counseling services. Also provided is an opportunity for students to examine their religious and spiritual belief systems and develop sensitivity to and respect for the religious and spiritual themes and

goals in the counseling process as befits each client's expressed preferences. (Prerequisite: permission required)

**COUN 5653 LGBT ISSUES IN COUNSELING** This course examines current issues related to counseling gay, lesbian, bisexual, and transgendered clients. Issues addressed include affirmative counseling; identity development; homophobia and heterosexism; family and relationship issues; youth, aging and the "coming-out" process; spirituality issues; HIV/AIDS, addiction, suicide, conversion therapies, and other issues; as well as ethical and professional issues in working with gay, lesbian, bisexual, and transgendered clients (Prerequisite: permission required)

**COUN 5663 INTRODUCTION TO PLAY THERAPY** This course is designed to assist counselors who work with children to understand the fundamental tenets of play therapy. Students will develop an effective philosophy of and approach to play therapy and an increased understanding of children's worldviews. In addition, play media will be utilized to enhance the counseling relationship and to promote self-understanding, personal growth, and development in children. (Prerequisite: permission required)

**COUN 5863 RESEARCH IN COUNSELING** This course provides an understanding of research methods, statistical analysis, and needs assessment strategies in the field of professional counseling. This course is designed to assist the student in becoming a critical consumer of research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research studies. Students are also introduced to ethical and culturally relevant strategies for interpreting and reporting the results of research studies accurately and effectively. (Prerequisite: permission required)

**COUN 5873 COUN CONSULTATION, ADMIN & PROGRAM EVALUATION** This course provides an introduction to studies related to the provision of counselor consultation services, counseling administration, and program evaluation procedures. The course places special emphasis on effective application of current theories and practices related to these three critical roles to today's professional counselor. (Prerequisite: permission required)

**COUN 5913 CLINICAL SUPERVISION IN COUNSELING** This course serves as a didactic and experiential course for graduate and post-graduate students who wish to assume the role of clinical supervisor to pre- and post-graduate counselors-in-training. Goals include the assimilation and application of major theoretical/conceptual models and approaches to clinical supervision in a variety of settings. (Prerequisites: COUN 5923 with a grade of B or higher; permission required)

**COUN 5923 COUNSELING INTERNSHIP I** This course requires the completion of a supervised internship experience in clinical mental health counseling, comprising of 300 clock hours of counseling-related experience, 120 of which must involve direct client contact. This course is intended to reflect the comprehensive work experience of a clinical mental health counselor at a field placement site. The student must be supervised on an individual and weekly basis by a university-approved site supervisor and must also attend weekly group supervision under the tutelage of a qualified university supervisor. (Prerequisite: COUN 5373, COUN 5523, and COUN 5543 with a grade of B or higher; permission required)

**COUN 5933 COUNSELING INTERNSHIP II** This course requires the completion of a supervised internship experience in clinical mental health counseling, comprising of 300 clock hours of counseling-related experience, 120 of which must involve direct client contact. This course is intended to reflect the comprehensive work experience of a clinical mental health counselor at a field placement site. The student must be supervised on an individual and weekly basis by a university-approved site supervisor and must also attend weekly group supervision under the tutelage of a qualified university supervisor. (Prerequisite: COUN 5530, COUN 5573, and COUN 5923 with a grade of B or higher; permission required)

**COUN 5960 DIRECTED READINGS IN COUNSELING** Individualized literature study in field of professional counseling, under the direction of a graduate-level counseling professor. (Prerequisite: permission required)

**COUN 5970 SPECIAL STUDIES IN COUNSELING** Individualized or group projects focused on the field of professional counseling and selected in consultation with a graduate-level counseling professor. (Prerequisite: permission required)

**COUN 5980 COUNSELING SEMINAR** Small group study of topic related to the field of professional counseling and announced by the department. (Prerequisite: permission required)

**COUN 5990 APPLIED COUNSELING RESEARCH** Independent research specifically focused on the field of professional counseling and designed in consultation with a graduate-level counseling professor. (Prerequisite: permission required)

**CS 1113 # COMPUTER LITERACY** A study of the basic computer operations, the role of computers in society, and some applications in business, industry, and education. (Does not count toward the Computer Science major or minor.)

**CS 1313 # LOGIC AND PROBLEM SOLVING** This course is the study of sound reasoning and the application of this reasoning to problem solving. In the course we will discuss many approaches to problem solving such as step algorithms, flow charts, set theory, truth tables and Warnier programs. Students will learn techniques to translate real life problems into forms which will enable computer programs to solve them. These techniques or tools should allow students to create and design programs that will be dependable and correct.

**CS 1613 # COMPUTER SCIENCE I** Introduction to computer programming. The entire process of creating software is examined from analysis and design to coding and testing. An emphasis is placed upon problem solving using top-down and bottom-up techniques. Language features include data types, functions, program flow control, and input/output.

**CS 1623 # COMPUTER SCIENCE II** Objects and classes are introduced in an examination of inheritance and polymorphism. Project management techniques including make files and debugging tools are discussed. Language features explored include dynamic memory management, parameter passing, name overloading and multidimensional arrays. (Prerequisite: CS 1613 with a grade of C or better)

**CS 2343 WEB PAGE PROGRAMMING** Basic concepts to design a web site. Included are content, navigation, graphics, and interactivity. HTML, internet programming, commercial domain licensing, development software, and effective layout. Students must maintain a web site.

**CS 2513 # SEMINAR IN PROGRAMMING** An additional computer programming course using the languages specified such as, but not limited to Pascal, Java, Fortran, Visual Basic, and other languages deemed appropriate. Fundamental programming skills are assumed as this course emphasizes the particular aspects of the specified language. This course is repeatable for credit with a different language specification. (Prerequisite: CS 1623 with a grade of C or better)

**CS 2813 # DATA STRUCTURES** Computers require information to be organized in a time and space efficient manner. The performance analysis and implementation of common structures including lists, queues, stacks, trees, heaps, and hash tables are the central themes of the course. In addition, students will incorporate existing libraries of structures with their programs. (Prerequisites: CS 1623 and MATH 2013, both courses must be passed with a grade of C or better)

**CS 3133 COMPUTER GRAPHICS** Computer graphics related hardware and software needs. Two dimensional graphics (scaling the screen; clipping; viewports; transformations; rotations, homogenous coordinates). Analytical Geometry; rectangular coordinates; polar coordinates. Three dimensional graphics: left-hand and right-hand coordinate system transformations, two dimensional images of three dimensional objects, hidden line/surface elimination, animation. (Prerequisites: CS 2813 and MATH 2215)

**CS 3143 COMPUTER ARCHITECTURE** A study of computer organization and operation. Includes hardware structure, machine and assembler languages, and software systems. (Prerequisite: CIS 2813 or CS 2813)

**CS 3223 # NET-CENTRIC COMPUTING** The study of how data is communicated from one computer to another including such topics as local area networks, network design, distributed processing, and telecommunication management. (Prerequisite: CS 1613 or CIS 1613)

**CS 3323 ADVANCED DATABASE ANALYSIS** Advanced database concepts such as custom reports generated by SQL, relational tables, integration of databases with web site interfaces, and compatibility issues with current internet programming platforms. Several commercially available database systems in use will be utilized for the solution of complex and comprehensive business and industry case studies (Prerequisite: CIS 3123)

**CS 4113 # OPERATING SYSTEMS** Batch systems, assemblers, macros, loaders, compilers, advanced operating systems, multiprogramming, multiprocessing. (Prerequisites: CS 3143)

**CS 4223 # ALGORITHM ANALYSIS** Advanced programming techniques, algorithm analysis, time and space analysis, special topics, searching, sorting, file processing, peripheral devices. (Prerequisites: CS 2813, MATH 2215 and STAT 2153)

**CS 4313 # COMPILER CONSTRUCTION** Translation concepts, arithmetic expressions, models of grammar, parsing, structure of translation trees. (Prerequisite: CS 3143)

**CS 4323 # PROGRAMMING LANGUAGES** Advanced features of several programming languages and their associated data structures; run-time stacks; memory management; scope rules; sub-programs; special purpose languages and advanced features of conventional languages. (Prerequisites: CS 3143)

**CS 4343 APPLIED NET-CENTRIC COMPUTING** This course focuses on integrating the class knowledge in computer science and internet technology together and applying those skills in local/wide area networks and virtual private network. Topics include: web technologies, network architecture, protocols, applications, management, and security. In addition, the network hands-on projects for students will include: configuring network services/servers such as DNS, DHCP, NATP, Firewall, TELNET, FTP, SSH, Email, Newsgroup, Database, and Web Servers, implementing the Network File System and Network Information System, sharing resources between Unis/Linus and Windows network systems and developing a Three-tier Database-driven on-line E-Commerce application (Prerequisite: CIS 3223)

**CS 4413 SYSTEMS ANALYSIS** Producing quality software on time and under budget that meets all user requirements through the software life cycle techniques. Cost estimation, project management, testing, and maintenance are stressed. (Prerequisites: 90 hours toward a baccalaureate degree) (Same as CIS 4413)

**CS 4423 SOFTWARE ENGINEERING** Practical application of systems software development using techniques learned in previous courses. Should be taken toward the end of a student's academic training. (Prerequisite: CS 4413) (Same as CIS 4423)

**CS 4623 ADVANCED WEB-BASED APPLICATION DEVELOPMENT** This course is to provide a comprehensive introduction to developing Web applications using the Microsoft .NET platform. Topics include: understanding ASP.NET and the .NET architecture, building Windows and Web applications using rapid applications development techniques, developing Web forms with server controls, displaying dynamic data from a database using ADO.NET, creating Web services and deploying Web applications. In addition, topics on HTTP, XML, SOAP, WSDL and C# or VB.NET will be introduced as well. (Prerequisites: CS 1623 or CIS 1623, CIS 2343 and CIS 3323)

**CS 4643 DISTRIBUTED NETWORKS** The purpose of this course is to learn the general concepts of distributed network computing and to realize how those concepts have been applied in computer network



technologies. Also, the advantages and disadvantages of those technologies will be discussed. Topics to be covered include: Basic Graph Concept, Distributed Network Computing-Sequential and Distributed algorithms, Network Protocols (TCP/IP, Multicast, and other protocols), Wireless and Multimedia Networks, Network Security, and Network Management (Prerequisite:MATH 2013, CIS 3223, and CS 2813 with grade of C or better)

**CS 4950 INTERNSHIP** Supervised-site experience in computer science or computer information systems gained through work. Weekly and term reports required. (Prerequisite: Departmental approval)

**CS 4960 DIRECTED READING** (Prerequisite: permission of the department)

**CS 4970 SPECIAL STUDIES** (Prerequisite: permission of the department)

**CS 4980 SENIOR SEMINAR** In this course students refine job search skills by developing a resume and cover letter. Students also complete a career development application and job search. Selected readings in career development will be assigned and discussed. In addition, students are expected to demonstrate knowledge in major fields through performance of research and writing and assesment testing. (Prerequisite: permission of the department)

**CS 5103 FOUNDATIONS OF COMPUTER SCIENCE** This course covers the mathematical and theoretical foundations of computer science. Topics include logic, proof techniques, recursion and recurrence relations, analysis of algorithms, combinatorics, basic data models/structures (sets,relations, linear models, trees, and graphs), and introductory computer theory (language theory, regular expressions, computability, NP-completeness, Turing Machines, etc.). CS5103 presents computer science from a mathematical and theoretical point of view, although implementation issues will be discussed. (Prerequisite: CS 1623 or CIS 1623)

**CS 5133 OPERATING SYSTEMS** Batch systems, assemblers, macros, loaders, compilers, advanced operating systems, multiprogramming, multiprocessing. (Prerequisites: CS 3143)

**CS 5213 ALGORITHM ANALYSIS** Advanced programming techniques, algorithm analysis, time and space analysis, special topics, searching, sorting, file processing, peripheral devises. (Prerequisites: CS 2813, MATH 2215 and STAT 2153)

**CS 5313 COMPILER CONSTRUCTION** Translation concepts, arithmetic expressions, models of grammar, parsing, structure of translation trees. (Prerequisite:CS 3143)

**CS 5323 PROGRAMMING LANGUAGES** Advanced features of several programming languages and their associated data structures; run-time stacks; memory management; scope rules; sub-programs; special purpose languages and advanced features of conventional languages. (Prerequisites: CS 3143)

**CS 5413 SYSTEMS ANALYSIS** Producing quality software on time and under budget that meets all user requirements through the software life cycle techniques. Cost estimation, project management, testing, and maintenance are stressed. (Prerequisite: departmentalapproval)

**CS 5423 SOFTWARE ENGINEERING** Practical application of systems software development using techniques learned in previous courses. (Prerequisite: CS 4413)

**CS 5623 ADVANCED WEB BASED APPLICATION DEVELOPMENT** This course is to provide a comprehensive introduction to developing Web applications using the Microsoft .NET platform. Topics include: understanding ASP.NET and the .NET architecture, building Windows and Web applications using rapid applications development techniques, developing Web forms with server controls, displaying dynamic data from a database using ADO.NET, creating Web services and deploying Web application. In addition, topics on HTTP, XML, SOAP, WSDL,and C# or VB.NET will be introduced as well. (Prerequisites: CS 1623,CIS 2343 and CS 3323)

**CS 5643 DISTRIBUTED NETWORKS** The purpose of this course is to learn the general concepts of distributed network computing and to realize how those concepts have been applied in computer network technologies. Also, the advantages and disadvantages of those technologies will be discussed. Topics to be covered include: Basic Graph Concept, Distributed Network Computing-Sequential and Distributed algorithms, Network Protocols (TCP/IP, Multicast, and other protocols), Wireless and Multimedia Networks, Network Security, and Network Management. Graduate students will be required to do extra projects and research reports. (Prerequisite: MATH 2013, CIS 3223, and CS 2813 with grade of C or better)

**CS 5960 DIRECTED READINGS**

**CS 5970 SPECIAL STUDIES**

**CS 5980 SEMINAR**

**CS 5990 RESEARCH FOR MASTER'S THESIS** Independent investigation designed in consultation with the student's graduate advisory committee. (Prerequisite: department approval)

**ECON 2113 # PRINCIPLES OF MACROECONOMICS** Examines the nature of market economies and the roles of private and public institutions and organizations in facilitating the efficient production, exchange, consumption, and accumulation of wealth. Overall performance concerns with inflation, unemployment, and growth are examined in the light of a variety of theoretical policy perspectives. May be taken before ECON 2213.

**ECON 2213 # PRINCIPLES OF MICROECONOMICS** Introduces the roles of the market price system in managing the use of society's resources and in rationing available supplies. The efficiency of resource management is examined in the light of a variety of more or less competitive market environments. Conclusions are inferred from the rational behavior of optimizing decision-makers. May be taken before ECON 2113.

**ECON 3633 # PUBLIC FINANCE** Investigates the economic and institutional justification for government spending and its financing through taxation and debt creation. (Prerequisites: ECON 2113 or 2213)

**ECON 5133 MANAGERIAL ECONOMICS** An application of microeconomic principles to business decision-making. Economic theory and quantitative methods are applied to managerial decisions about pricing, production, profit maximization, and government restraints. It is presumed the student has an understanding of preliminary calculus.

**EDAD 5303 SCHOOL ADMINISTRATION** An examination of the history, theories, principles and practices in school administration.

**EDAD 5313 SCHOOL AND COMMUNITY RELATIONS** An exploration of the need for presenting factual information and communication through collaboration with all school and community stakeholders.

**EDAD 5323 SUPERVISION OF INSTRUCTION** The examination of theory, research, and evolving concepts which have practical implications for supervision of all facets of instruction in schools.

**EDAD 5333 SCHOOL FINANCE** Sources of school finance, control of expenditures, and general principles of financial administration.

**EDAD 5343 ELEMENTARY SCHOOL PRINCIPALSHIP** The essential duties and practices required of successful elementary school principals. (Prerequisite: departmental approval)

**EDAD 5353 SECONDARY SCHOOL PRINCIPALSHIP** The essential duties and practices required of successful secondary school principals. (Prerequisite: departmental approval)

**EDAD 5363 SCHOOL FACILITY PLANNING** Planning, designing, utilizing, and maintaining public school buildings. (Prerequisite: departmental approval)

**EDAD 5373 PUBLIC SCHOOL LAW** A study of the legal regulations as they relate to the administration of public schools.

**EDAD 5383 THEORY TO PRACTICE IN SCHOOL ADMINISTRATION** The examination of modern theories and issues of education and their application to today's schools. (Prerequisite: departmental approval)

**EDAD 5393 THE SCHOOL SUPERINTENDENT** This course will be an overview of practical day to day responsibilities of a school superintendent.

**EDAD 5403 SCHOOL OPERATIONS MANAGEMENT** This course will address facilities, finance, resource allocations, resource management, and technology for the principal.

**EDAD 5413 MANAGEMENT OF SCHOOL AUXILIARY SERVICES** Overview of auxiliary services for public school districts including: transportation, food service management, maintenance, custodial services, purchasing, and other related support services to the management of a school district.

**EDAD 5423 PRACTICUM IN SCHOOL BUSINESS ADMINISTRATION** A practical hands on application under the supervision of a school superintendent or the business manager of a school district. Covering those areas germane to the business aspects of a school district.

**EDAD 5453 EDUCATION AND COMMUNITY RELATIONS** Public school community relations from the perspective of the central office.

**EDAD 5463 LEGAL ASPECTS FOR STUDENTS WITH DISABILITIES** This course provides the graduate student with a knowledge of special education, the implications of special education, the laws that govern special education, and the court cases that define special education.

**EDAD 5473 ADMINISTRATION OF SPECIAL PROGRAMS** Administrative and legal issues of working with special populations in schools such as special education, bilingual education, ESL, gifted & talented, and federal programs.

**EDAD 5483 THE SCHOOL PRINCIPAL** This course uses the framework of a school improvement plan to provide opportunities for candidates to demonstrate and apply the knowledge, abilities, and dispositions necessary to administer, develop, evaluate, implement, communicate, and plan for the responsibilities of leadership and data based school improvement.

**EDAD 5543 SPECIAL PROGRAMS IN EDUCATION** A look at those programs such as: federal entitlement programs and grants, special education, grants, vocational technical education, Johnson-O'Malley, and other related programs that impact educational services in a school district.

**EDAD 5553 SPECIAL TOPICS IN EDUCATION LAW** An extension of public school law dealing with state and federal regulations, statutes, and cases most affecting the management of school boards and central office personnel.

**EDAD 5933 INTERNSHIP II:CAPSTONE EXPERIENCE FOR PRICIPALSHIP** This course provides opportunities for candidates to demonstrate and apply the knowledge, abilities, and dispositions necessary to administer, develop, evaluate, implement, communicate, and plan for the responsibilities of school leadership (Prerequisite: departmental approval)

**EDAD 5943 INTERNSHIP FOR THE SCHOOL SUPERINTENDENT I** A two-semester (6 hours) commitment of hands-on experience for the prospective superintendent under the direct supervision of a practicing school superintendent or assistant superintendent.

**EDAD 5953 INTERNSHIP FOR SCHOOL SUPERINTENDENT** This course provides the opportunities to candidates to demonstrate and apply knowledge abilities, and dispositions through hands-on experience for the prospective superintendent under the direct supervision of a practicing school superintendent or assistant superintendent.

**EDAD 5960 DIRECTED READING IN EDUCATION ADMINISTRATION** Directed Readings in the field of educational administration

**EDUC 2000 PRE-STUDENT TEACHING FIELD EXPERIENCES I** An on-site orientation to the role of the teacher in the public school including observation in the classroom and assisting the teacher in various duties. Requires a minimum of fifteen clock hours in the public school. (Prerequisite: thirty (30) semester hours)

**EDUC 2013 FOUNDATIONS OF EDUCATION** An introduction to the historical and philosophical foundations of education. Other topics include: insights into the teaching profession and the school in today's multicultural society, its purposes, organization and operation.

**EDUC 3002 PRE-STUDENT TEACHING FIELD EXPERIENCES II** This course is designed to advance the student's awareness and skills of classroom activities by serving in the role of a paraprofessional for a minimum of seventy-five hours in the public school. This course should be taken concurrently with EDUC 3334 Teaching Strategies, Adaptations, and Modification in Education. (Prerequisites: Pre-Student Teaching Field Experience I and admission to Teacher Education)

**EDUC 3113 EDUCATIONAL MEASUREMENT, ASSESSMENT, & EVALUATION** The unit ensures that teacher candidates acquire principles and methods of measurement and evaluation in the schools by including the administration, scoring, and interpretation of standardized tests and construction of teacher-made tests and learn to apply the professional and pedagogical knowledge and skills to become competent to work with all students. (Prerequisite: admission to Teacher Education)

**EDUC 3313 TECHNOLOGY INTEGRATION FOR THE CLASSROOM** This course focuses on the integration of technology into the PK-12 curricula. A hands-on approach gives students experience in planning and developing technology-based products and activities that address state academic standards and national educational technology standards. (Prerequisites: CIS 1003 or BIM 1553 with a grade of C or better)

**EDUC 3334 TEACHING STRATEGIES, ADAPT. & MODIF. IN EDUCATION** The intent of this course is to provide the teacher education candidate with the knowledge, wisdom, and a repertoire into the variety of instructional perspectives that are available to be utilized for successful teaching in the classroom. (Prerequisites: EDUC 3313 and admission to Teacher Education)

**EDUC 3434 TEACHING STRATEGIES AND PROGRESS MONITORING** This course seeks to prepare the Teacher Candidate to plan, develop, and implement instructional practices used with a variety of students and to assess the effectiveness of those practices using informal and formal assessment practices to monitor progress.

**EDUC 4000 PRE-STUDENT TEACHING FIELD EXPERIENCES III** This course is designed to continue to advance skills and knowledge in application of techniques and principles relating to instruction in the student's area of specialization. Requires a minimum of fifteen clock hours in the public school and completion of ETS Major Field Achievement Test in Education. (Prerequisites: Pre-Student Teaching Field Experience II and admission to Teacher Education)

**EDUC 4443 CLASSROOM AND BEHAVIORAL MANAGEMENT** This course will develop knowledge and skills regarding the best practices related to motivation and behavior to create learning environments that encourage positive social interaction, self-motivation, and active engagement in learning; thus, providing opportunities for success. (Prerequisite Admission to Teacher Education)

**EDUC 4910 TEACHING EXPERIENCES IN MAJOR PROGRAM** Observation, participation, and supervised teaching in the public schools. Nine credit hours are required by the Oklahoma State Department of Education. This will be split for double majors. (Prerequisite: admission to Student Teaching)

**EDUC 4960 DIRECTED READING** Individualized literature study in some area of education selected in consultation with the professor. (Prerequisite: departmental approval)

**EDUC 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: departmental approval)

**EDUC 4980 SEMINAR** Small group study of topic announced by department.

**EDUC 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: departmental approval)

**EDUC 5103 HISTORY AND PHILOSOPHY OF EDUCATION** Educators will explore, critically appraise, and apply the historical and philosophical foundations of education to their professional practice. Attention will be given to such topics as the purposes of education, professional ethics, technology and education, and diversity in schools and society.

**EDUC 5113 FUNDAMENTALS OF CURRICULUM DEVELOPMENT** The examination of the curriculum worker's task of helping teachers to attain and maintain a desirable learning and teaching situation for both elementary and secondary school students.

**EDUC 5153 TEACHING STRATEGIES** An investigation of contemporary problems of classroom instruction and related educational and social concerns. Additional strategies for coping with these problems are examined.

**EDUC 5174 ADVANCED EDUCATIONAL PSYCHOLOGY OF ADOLESCENTS** The broad conceptual framework of this course is the psychological/educational implications of the life stage called "adolescence". There will be strong emphasis on the psychological principles and theories relating and applying to the educational process, developmental characteristics, appropriate classroom-management alternatives, and analysis of the teaching-learning process, especially as it relates to diversity among adolescents and young adults.

**EDUC 5183 LEADING IN CULTURAL RESPONSIVE LEARNING ENVIRONMEN** Theoretical and practical foundations to empower visionary leaders with the required innovative culturally-responsive knowledge/skills required to thrive in a variety of socio-economically and/or geographically diverse organizations, such as: K-12 schools, for and/or non-profit organizations, universities, libraries and museums.

**EDUC 5203 INTRODUCTION TO EDUCATIONAL RESEARCH** A study of research methodology and literature related to solving educational problems and improving the learning process.

**EDUC 5223 EDUCATIONAL STATISTICS** Calculating statistics and interpreting the results in solving problems in education.

**EDUC 5313 INTRODUCTION TO LEARNING TECHNOLOGIES** This course will empower students with the theoretical and practical foundation to create and support innovative, transformational learning environments that are infused with technology.

**EDUC 5333 DIGITAL STORYTELLING/COMM TO EMPOWER LEARN COMMUNI** Theoretical and practical foundations to empower visionary leaders with the required innovative technology-based digital storytelling/digital communications knowledge/skills required to thrive in a variety of organizations (K-12 schools, for and/or non-profit organizations, universities, libraries, museums, etc.) and help leaders bridge the/their digital divide locally, state-wide, nationally and globally.

**EDUC 5353 LEARNING TECHNOLOGIES TO BRIDGE THE DIGITAL DIVIDE** Theoretical and practical foundations to empower visionary leaders with the required innovative technology-based socio-political knowledge/skills require to thrive in a variety of organizations (K-12 schools, for and/or non-profit organizations, universities, libraries, museums, etc.) The overall goal of this course is to support leaders to help bridge their stakeholders' digital divide locally, state-wide, nationally and globally.

**EDUC 5373 INNOVATIVE LEADERSHIP FOR DIGITAL AGE LEARNING ENV** Theoretical and practical foundations to empower visionary leaders with the required innovative technology-based management/administrative-related knowledge/skills required to thrive in a variety of organizations (K-12 schools, for andms, etc.) This course will also address the legal issues related to leading digital citizens.

**EDUC 5413 STUDENT AND PROGRAM ASSESSMENT AND EVALUATION** Explores the use of a range of formal and informal assessment methods to plan for instruction, to monitor and evaluate student progress, to involve students in the assessment process, and to report student achievement to various audiences.

**EDUC 5513 PROFESSIONALISM, REFLECTION AND ETHICAL PRACTICE** Ethical and professional practice standards and the professional educator's multiple roles and complex situations across wide age and developmental ranges. Emphasis is on the value of reflection and requires candidates to practice writing using description and analysis. Candidates will be required to describe and analyze student assignments and to reflect on their teaching practices utilizing specific writing skills identified by NBPTS as highly effective.

**EDUC 5613 COLLABORATION BETWEEN FAMILIES, COMMUNITIES&SCHOOL** Effective strategies for collaboration with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways to promote the learning and well being of students and the value of local school/community support for district priorities and policies.

**EDUC 5673 THE ROLE OF THE MATHEMATICS SPECIALIST** This course will investigate the role of the Mathematics Specialist in supporting and facilitating effective instruction and professional growth in mathematics

**EDUC 5683 PRACTICUM-MATH SPECIALIST** Supervised experience under the direction of university faculty in cooperation with local and state educational personnel. Experiences are designed to prepare teachers to assume the duties and responsibilities of a Mathematics Specialist. (Prerequisite: passing score on comprehensive exam)

**EDUC 5960 DIRECTED READINGS** Individualized literature study in some area of education selected in consultation with the professor. (Prerequisite: departmental approval)

**EDUC 5970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: departmental approval)

**EDUC 5980 SEMINAR** Small group study of topic announced by department.

**EDUC 5990 RESEARCH FOR MASTER'S THESIS**

**EET 1053 SURVEY OF ELECTRONICS** A broad general view of electricity and electronics. Fundamental concepts are emphasized with an introduction to various electronic systems.

**EET 2083 DC CIRCUIT ANALYSIS** A study of DC circuit analysis methods in series, parallel, and series-parallel circuits. The study includes: Ohm's law, Thevenin's and Norton's Theorems, mesh current and node voltage analysis, with an introduction to DC instrumentation. (Prerequisite: MATH 1513)

**EET 2113 DIGITAL LOGIC** Course covers both TTL and CMOS techniques including: logic gates, flip-flops, counters, monostable and astable multivibrators, shift registers, MSI and LSI solutions, and interfacing techniques. (Prerequisite: EET 1053 or 2083)

**EET 2173 AC CIRCUIT ANALYSIS** The analysis of RLC passive networks in response to single and multiple sinusoidal, ramp, and pulse sources. Complex numbers are used in conjunction with Thevenin's and Norton's Theorems, mesh current and nodal analysis, and other theorems. This study also includes passive RLC filters, transformers, and an introduction to AC instrumentation. (Prerequisite: EET 2083 and MATH 2215)

**EET 3203 ELECTRONIC INSTRUMENTATION** Instrumentation circuit theory and application. Instruments studied include: bridges, voltmeters, oscilloscopes, signal generators, and signal analyzers. Additional topics are noise reduction techniques, transducer interfacing, and digital instrumentation circuitry. (Prerequisite: EET 2173 and corequisite: EET 3233)

**EET 3213 AVIONICS** Aircraft communication and navigation systems including VHF omnirange, area navigation, instrument landing systems, automatic direction finders, LORAN-C (long-range navigation), distance measuring equipment, and transponders. (Prerequisite: EET 1053 or 2083)

**EET 3233 BASIC SEMICONDUCTORS** This course covers elementary semiconductor physics, the design and analysis of small signal bipolar transistor and field-effect transistor amplifiers,  $h$  and  $y$  parameters, frequency response of single stage amplifiers, and an introduction to multistage amplifiers. (Prerequisite: EET 2173)

**EET 3263 ELECTRONIC EQUIPMENT FABRICATION** Processes for manufacturing electronic equipment, including computer-aided drafting, computer-aided circuit board design, component selection, tools, hardware, connectors, and packaging techniques. (Prerequisites: EET 3203 and 3233)

**EET 3283 RF AND MICROWAVE THEORY** A study of RF design techniques and phenomena including: transmission lines, the Smith Chart, RF and microwave measurements, coaxial cables and waveguides, impedance measurement and matching, RF and microwave sources and components, and antenna fundamentals. (Prerequisites: EET 3203 and 3233)

**EET 3293 INTRODUCTION TO MICROCONTROLLERS** An in-depth study of the PIC16C84 microcontroller. Topics include assembly programming, basic programming, EEPROM memory programming, hardware configurations, interfacing, and embedded applications. (Prerequisite: EET 2113)

**EET 3343 SEMICONDUCTOR FABRICATION** Introductory course which includes device design and layout, crystal growth, wafer preparation, contamination control/clean room procedures, and wafer fabrication process. (Prerequisites: EET 3203 and EET 3233)

**EET 3353 LINEAR INTEGRATED CIRCUITS** Design and analysis of circuits using operational amplifiers, Norton amplifiers, waveform generators, and integrated circuit regulators. Circuits include amplifiers, summers and difference amplifiers, waveshaping and waveform generators, active filters, and linear power supplies. (Prerequisite: EET 3233)

**EET 3403 COMPUTER ARCHITECTURE** Description of computer systems; arithmetic algorithms including number systems, addition and subtraction, multiplication and division, and other functions of the ALU; central processors and their applications in micro and mini computers; memory management; applications of microprogramming; and input-output. (Prerequisite: EET 3293)

**EET 3523 MICROCOMPUTER INTERFACING** A study of the techniques used to connect microcomputers to the analog world. Topics discussed are: port decoding schemes; hardware and software requirements for microcomputer input and output; theory, operation, and programming of the 8255 PPI; A/D and D/A conversion techniques; and electronic power devices. Research project required. (Prerequisites: EET 3293 and 3233)

**EET 4153 ANTENNA DESIGN** A study of theory, design and fabrication of antennas from longwave to microwave. Software includes MIMINEC, NECI, Thinwire, and YAGI-VDA optimization techniques. (Prerequisites: EET 3203 and EET 3283)

**EET 4163 ELECTRONIC CONTROL SYSTEMS** A study of the elements of process control, signal conditioning, thermal, mechanical, and optical transducers, discrete-state process control, analog and digital controllers, and control loop characteristics. (Prerequisites: EET 3203 and 3353)

**EET 4223 OPTOELECTRONICS** Includes theory and design of circuits using optoelectronic devices and optical components. Topics include: properties and theory of light propagation, light sources and detectors, fiber optic systems and applications, lasers, photometry and radiometry, and safety procedures. A research project is required. (Prerequisites: EET 3203 and 3353)

**EET 4413 DIGITAL SIGNAL PROCESSING** A study of digital signal processing and programming. Topics include discrete time signals, digital signaling processing hardware, the fast fourier transform, digital filter synthesis including infinite impulse response, finite impulse response, and wave lengths. (Prerequisite: EET 3523)

**EET 4443 ELECTRONIC COMMUNICATIONS** Radio transmission and reception techniques including: noise, broadband amplifiers, oscillators, receivers, transmitters, transmission lines, antennas, and radio-wave propagation. Modulation methods studied include: amplitude, single-sideband, frequency, and digital. (Prerequisites: EET 3203 and 3353)

**EET 4473 TROUBLESHOOTING TECHNIQUES** Discrete and integrated electronic circuits are studied from the standpoint of failure analysis and repair. Circuits used include: power supplies, AF and RF amplifiers, digital systems, and microcomputers. Theory and use of specialized AF, RF, and digital test equipment is covered. ( Prerequisite: EET 3523 )

**EET 4503 ROBOTICS** The theory application, and design of robotic devices. Subject matter includes an introduction to robotics, operating robots, robot coordinate systems, teach pendant programming, off-line programming, mechanics and power systems, and robot interfacing. A robotic project is required. (Prerequisite: EET 3523 )

**EET 4513 ELECTRONIC CIRCUIT DESIGN** Advanced topics include: linear and switching supply regulation techniques; amplifier biasing; differential amplifiers; stability of feedback amplifiers; and DC, AF, and RF amplifier design. Computer-aided circuit analysis is used throughout . (Prerequisites: EET 3203 and 3353)

**EET 4970 PROBLEMS IN ELECTRONICS** Assignment of advanced electronics circuit and application problems for research, design, testing and application. (Prerequisite: 18 hours of electronics and permission of the Department Chair)

**EET 4980 SEMINAR** Subject announced by department (Permission required)

**EET 4990 SENIOR RESEARCH** Research project involves proposal, time scheduling, research, design, prototyping, final design, testing, and final report on electronic problem of special interest to the student. Permission required. (Prerequisites: EET 4533 and 4553)

**EICD 2213 FOUNDATIONS OF LITERACY** Designed specifically for the undergraduate Early Intervention Child Development candidate. The focus of this course is emergent literacy.

**EICD 3024 FAMILIES AND THE DEVELOPING CHILD** This course focuses on instruction in parent-child relations, parenting practices, special needs of children, parental and environmental influences on child development, external support services, and related public policy issues. This course also includes instruction in the intellectual, social, emotional, and biological development of children and the planning and design of related human services. Particular emphasis will be placed "theory into practice" model in which



best practice is applied to family-centered intervention for parents of all ages, including adolescent parents so that the early intervention programs are "family friendly"

**EICD 3034 PROFESSIONAL AND ETHICAL PRACTICE** Ethical and professional practice standards and the professional educator's multiple roles and complex situations across a wide age and development range. Participation in learning communities and professional activities that benefit individuals with early learning needs, their families and colleagues will be included.

**EICD 3044 INDIVIDUAL LEARN DIFF IN YNG CHLD WITH DISAB** Understanding, valuing and supporting people with severe and profound and moderate disabilities, their families, and their cultures. Focuses on physical, sensory, medical, and health aspects of child development, including etiology and symptomatology of developmental disabilities affecting development. Emphasizes positioning, handling, adaptive strategies, and understanding of assistive technology devices. Focuses on the understanding of roles of related disciplines in collaborative planning and service delivery.

**EICD 3064 COLLAB WITH FAM HEALTH/MEN HLTH PROF AND COMM** The importance and complex characteristics of children's families and communities and how to use this understanding to create respectful, reciprocal relationships that support and empower families, and to involve all families in their children's development and learning.

**EICD 4074 ASSESS AND INTERV FOR INFANTS AND TODDLERS: BIRTH-4** A study of the assessment and intervention for infants and young children from birth through three years with particular emphasis on using developmental knowledge of young children's characteristics and needs to create effective learning environments. Examines the full range of assessment issues: from test development to cultural competence. With an emphasis on family-centered practices, the impact of a child's every day environment and the value of collaborative decision-making in order to understand the "whole" child who has a developmental delay or a disability.

**EICD 4084 ASSESS & RESEARCH BASED INST: LITERACY AND READING** This course will include Research Based Instruction (RBI), increasing in intensity to individualized intervention in the area of literacy and reading for young children, targeting birth to pre-K. Topics include language development and emergent literacy skills; reading sub skills, auditory discrimination, phonemic awareness, decoding word recognition and reading comprehension. Developmental reading will be included.

**EICD 4113 LANGUAGE DEVELOPMENT** Examines strategies to develop language, literacy, and communication in young children with varying abilities. Explores the importance of adult-child interaction, as well as the effect of bilingualism, cultural diversity, cognitive ability, and language disorders. This course also addresses the need for augmentative communication, typical and atypical language development, the ways in which exceptional conditions can interact with an individual's experience with and the use of language and individualized strategies to enhance language development, and communication skills.

**EICD 5243 HUMAN GROWTH AND DEVELOPMENT** This course introduces studies that provide an understanding of the nature and needs of persons at all developmental levels and in diverse cultural contexts. This course also provides a systemic study of human development emphasizing physical, personality, cognitive, moral, and psychosocial developmental theories and issues, with an emphasis on facilitating optimal development and wellness over the lifespan. (Permission required)[CACREP Standard 3-Human Growth and Development]

**EICD 5263 ADVANCED PSYCHOLOGY CHILD & ADOLESCENCE** A study of selected theories and significant areas of research contributing to the understanding of child and adolescent behavior and development including a general framework for understanding differing abilities and strategies for differentiated interventions (CACREP 2.3.L., 2016)(Permission required)

**EICD 5863 RESEARCH IN EICD** This course provides an understanding of research methods, statistical analysis, and needs assessment strategies in the field of professional counseling. This course is

designed to assist the student in becoming a critical consumer of research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research studies. Students are also introduced to ethical and culturally relevant strategies for interpreting and reporting the results of research studies accurately and effectively. (Permission required)

**EICD 5971 CAPSTONE IN EARLY INTERVENTION & CHILD DEVELOPMENT** In this course, learners demonstrate mastery of knowledge, scholarship, and research proficiency in their chosen area of concentration. Learners synthesize the knowledge, competencies, and skills gained throughout the program and apply ethical principles to academic and professional activities and effectively articulate concepts using the program objectives. They may choose a project or portfolio presentation to complete this capstone course.

**ELED 2213 FOUNDATIONS OF LITERACY** Designed specifically for the undergraduate elementary teacher candidate. The focus of this course is emergent literacy.

**ELED 3223 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL** Study of and experience with knowledges and processes appropriate for teaching social studies at the elementary and middle school level. (Prerequisite: completion of 50 hours of general education including the American Studies section)

**ELED 3423 TEACHING READING IN ELEMENTARY SCHOOL, PART I** To prepare the elementary education major to be functional in techniques of teaching the reading process. (Prerequisite: completion of 50 hours of general education courses, ELED 2213 with a grade of C or better)

**ELED 3433 TEACHING READING IN ELEMENTARY SCHOOLS, PART II** To prepare the elementary education major to be functional in techniques of teaching vocabulary development, comprehension skills, and content area reading skills. (Prerequisite: ELED 3423 with a grade of C or better)

**ELED 3513 EMERGENT AND DEVELOPING LITERACY (PRE K & K)** Designed specifically for the undergraduate elementary, early childhood and special education teacher candidate. The focus for this course is emergent and developing literacy in Pre K and kindergarten classrooms.

**ELED 3523 LITERACY IN THE PRIMARY GRADES (1-3)** Designed specifically for the undergraduate elementary, early childhood and special education teacher candidate. The focus for this course is literacy in the primary grades (1-3). (Prerequisite: ELED 3513 with grade of C or better)

**ELED 3533 LITERACY IN THE INTERMEDIATE GRADES (4-6)** Designed specifically for the undergraduate elementary, early childhood and special education teacher candidate. The focus for this course is literacy in the intermediate grades (4-6). Prerequisite: ELED 3523 with grade of C or better

**ELED 3543 ADOLESCENT LITERACY (7-8)** Designed specifically for the undergraduate elementary, early childhood and special education teacher candidate. The focus for this course is adolescent literacy. Prerequisite: ELED 3533 with grade of C or better.

**ELED 4323 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL** Creative integration of listening, speaking, written expression, and handwriting in traditional and innovative school programs. (Prerequisites: ELED 3423 and ELED 3433 with a grade of C or better)

**ELED 4444 DIAGNOSIS & REMEDIATION OF READING AT ELEM LEVEL** Includes assessment procedures, class profiles, referral techniques, as well as development of instructional programs using instructional objectives, and diagnosis and tutoring of struggling readers. (Prerequisites: ELED 3423 and ELED 3433 with a grade of C or better) Students must obtain a grade of C or better in this class to continue.

**ELED 4513 LANGUAGE ARTS I (PRE K - 3)** Designed specifically for the undergraduate elementary, early childhood teacher candidate. This course includes listening, speaking, reading, writing, viewing and visual representation. Intergration of grammar, spelling, vocabulary, handwriting and word processing

instruction into the writing process is included. This course focuses on emergent and developing learners in pre K, kindergarten, and primary grades (1-3)

**ELED 4523 SURVEY OF EARLY CHILDHOOD EDUCATION** A study of the history, philosophy, methods, and theories for educating the young child from three through eight years.

**ELED 4533 LANGUAGE ARTS II (4-8)** Designed specifically for the undergraduate elementary teacher candidate. This course includes listening, speaking, reading, writing, viewing and visual representation. Integrating of grammar, spelling, vocabulary, handwriting, and word processing instruction into the writing process is included. This course focuses on learners in intermediate grades (4-6) and middle grades (7-8)

**ELED 4623 EARLY CHILDHOOD EDUC CURRICULUM I** A realistic, functional approach to the development of an early childhood curriculum with concentration on actual student made materials and demonstrations. The content areas included are creative arts (music and art), motor skills, and language development. (Prerequisite: ELED 4523)

**ELED 4723 EARLY CHILDHOOD EDUC CURRICULUM II** A realistic, functional approach to the development of an early childhood curriculum with concentration on actual student made materials and demonstrations. The content areas included are health, nutrition, social studies, science, and mathematics. (Prerequisite: ELED 4523 and 4623)

**ELED 4803 METHODS OF INSTRUCTION FOR ELEMENTARY TEACHERS** Includes comprehensive organizational, and instructional techniques using a variety of strategies for teaching all curriculum areas at the elementary level. (Prerequisite: admission to Teacher Education)

**ELED 4923 TEACHING EARLY CHILDHOOD EDUCATION** To provide a study of children's developmentally appropriate learning environment and those varied materials which challenge and stimulate new interests and make the child aware of his own creative abilities. (Prerequisite: ELED 4523,4623 and 4723)

**ELED 4960 DIRECTED READING** Individualized study in elementary education selected in consultation with the professor. (Departmental permission required)

**ELED 4970 SPECIAL STUDIES** Individualized project in elementary education selected in consultation with the professor. (Departmental permission required)

**ELED 4980 SEMINAR** Small group study of topic in elementary education announced by department. (Departmental permission required)

**ELED 4990 RESEARCH** Independent investigation in elementary education designed in consultation with the professor. (Departmental permission required)

**ELED 5013 FOUNDATIONS & SURVEY OF READING AT THE ADV LEVEL** Reading process analysis, methods, materials, and construction of learning units applicable at the advanced levels of reading.

**ELED 5023 DIAGNOSIS & CORRECTION OF READING DISABILITIES I** Informal diagnosis of reading problems; orientation to clinical diagnosis, case studies, developmental and remedial practices. (Prerequisite: ELED 5003)

**ELED 5033 DIAGNOSIS & CORRECTION OF READING DISABILITIES II** Clinical diagnosis, diagnostic procedures, administration of individual clinical tests, and work with clinical cases. (Prerequisite: ELED 5023)

**ELED 5040 PRACTICUM IN READING I** Classroom application of diagnostic and prescriptive procedures with a small group of children who have severe reading problems. (Prerequisite: ELED 5023 and 5033)

**ELED 5053 ORGANIZATION & SUPERVISION OF READING PROGRAMS** Reading processes grades 1-12; reading specialist's role; planning school-wide reading programs; supervision techniques; in-service training.

**ELED 5060 PRACTICUM IN READING II** Clinical application of diagnostic and prescriptive procedures with individuals who have severe reading problems. Exit reports and conferences with parents and teachers. (Prerequisite: ELED 5023 and ELED 5033)

**ELED 5603 THEORIES & RESEARCH IN LANGUAGE ARTS** This course investigates theories and research in language arts so that candidates can explain, compare, contrast, and critique the theories and research. This course, along with ELED 5613, lays the theoretical and research foundation for the remainder of the ELED courses required for a M.Ed Reading Specialist.

**ELED 5613 THEORIES & RESEARCH IN READING** This course investigates theories and research in reading so that candidates can explain, compare, contrast, and critique the theories and research. This course, along with ELED 5603, lays the theoretical and research foundation for the remainder of the ELED courses required for a M.Ed Reading Specialist.

**ELED 5623 DIAGNOSIS & CORRECTION OF READING DISABILITIES I** Formal and informal diagnosis of reading problems, orientation to clinical diagnosis, case studies, developmental and remedial practices. (Prerequisites: ELED 5603 and ELED 5613)

**ELED 5633 DIAGNOSIS & CORRECTION OF READING DISABILITIES II** Formal and informal diagnosis of reading problems, orientation to clinical diagnosis, case studies, developmental and remedial practices. (Prerequisites: ELED 5603 and ELED 5613)

**ELED 5643 LITERACY MATERIALS AND ENVIRONMENTS** Characteristics of appropriate literacy materials and environment for grades 1-12. How literacy materials and environments affect learning to read and write, developing effective reading and writing strategies, and enhancing the desire to read and write. (Prerequisites: ELED 5623 and ELED 5633)

**ELED 5653 CONTENT AREA READING** This course concentrates on reading in the content areas of the curriculum. Current theories and research will be applied as candidates examine and evaluate content area textbooks and resource materials, collaborate with content area teachers, and construct content area learning units. (Prerequisites: ELED 5623 and ELED 5633)

**ELED 5663 OLDER, STRUGGLING READERS & ENGLISH LANG LEARNERS** This course deals with research regarding older struggling readers and English language learners, the difficulties faced by these readers and their teachers, and strategies to enhance these students' literacy development. (Prerequisites: ELED 5643 and ELED 5653)

**ELED 5673 THE ROLE OF THE READING SPECIALIST/LITERACY COACH** Reading process grades 1-12; reading specialist's/literacy coach's role; planning school wide reading programs; supervision techniques; in-service training. (Prerequisites: ELED 5643 and ELED 5653)

**ELED 5683 PRACTICUM IN READING I (GRADES PK-8)** Clinical application of diagnostic and prescriptive procedures with individuals and small groups of students who have severe reading problems. This teaching will be completed under the direct supervision of the course instructor. (Prerequisites: ELED 5663 and ELED 5673)

**ELED 5693 PRACTICUM IN READING II (GRADES 9-12)** Clinical application of diagnostic and prescriptive procedures with individuals and small groups of students who have severe reading problems.

This teaching will be completed under the direct supervision of the course instructor. (Prerequisites: ELED 5663 and ELED 5673)

**ELED 5960 DIRECTED READINGS** Individualized study in elementary education selected in consultation with the professor. Graduate level.

**ELED 5970 SPECIAL STUDIES** Individualized project in elementary education selected in consultation with professor. Graduate level.

**ELED 5980 SEMINAR** Small group study of topic in elementary education announced by department. Graduate level.

#### **ELED 5990 RESEARCH FOR MASTER'S THESIS**

**ENG 0123 PRE-COLLEGE ENGLISH** A study of composition, grammar and usage. (Required of students who lack high school credits in English and those who do not pass entrance examination; does not fulfill general education requirement in grammar and composition.)

**ENG 1113 # COMPOSITION I** Practice of the fundamentals of the writing process in personal and expository writing. Emphasis is on supporting a thesis with specific detail, writing for a particular audience, sentence structure. and revising and editing. (Fulfills three hours of general education requirement in grammar and composition.)

**ENG 1213 # COMPOSITION II (Second Half)**. Academic writing, with emphasis on technique and style. Includes a research component and refining of skills. (Prerequisite: ENG 1113; fulfills three hours of general education requirements in grammar and composition.)

**ENG 2313 # INTRODUCTION TO LITERATURE** Study of selected literary works, with emphasis on both understanding literary forms and grasping literature as commentary on life. (Same as HUM 2313)

**ENG 2413 # CRITICAL APPROACHES TO LITERATURE** Introduction to literary analysis and criticism, including a survey of critical approaches, and the writing of short papers from different critical points of view. (Prerequisite: ENG 1113,ENG 1213)

**ENG 2873 # LANGUAGE AND CULTURE** Analysis of the basic elements of language, language use, and culture; analysis of the relationship between language and culture.(Prerequisites:ENG 1113 and ENG 1213)

**ENG 2963 # ENGLISH LANGUAGE & GRAMMAR** Analysis of the basic elements of English grammar, language use, and culture; analysis of the relationship between language and culture. (Prerequisites:ENG 1113 and ENG 1213)

**ENG 3543 # ENGLISH LITERATURE TO 1800** Works of major authors from the beginning to the Romantic Period. (Prerequisite: ENG 2413 for English majors; permission required for others)

**ENG 3653 # ENGLISH LITERATURE SINCE 1800** Works of major authors from the Romantic Period to the present. (Prerequisite: ENG 2413 for English major; permission required for others)

**ENG 3773 # AMERICAN LITERATURE TO 1865** Selections of literature from the Colonial Period through most of the Romantic Era. (Prerequisite: ENG 2413 for English majors. permission required for others.)

**ENG 3883 # AMERICAN LITERATURE SINCE 1865** Selections of literature from 1865 to the present. (Prerequisite: ENG 2413 for English majors. permission required for others)

**ENG 3893 # WORLD LITERATURE IN TRANSLATION** A study of selected works from the great authors of Greece, Rome, Spain, Russia, France, Germany, Asia, and Latin America. (Prerequisite: ENG 1213)

**ENG 3903 # BUSINESS & PROFESSIONAL WRITING** Study and practice in academic writing and writing of reports, proposals, memoranda, and other kinds of prose used in the fields of academia, business, and industry. (Prerequisite: ENG 1113 and ENG 1213) (Previously listed as TECHNICAL & PROFESSIONAL WRITING)

**ENG 4013 # MEDIEVAL LITERATURE** Selections of British and European literature written during the medieval period. (Prerequisite: ENG 2413 for English majors or permission from English department advisor)

**ENG 4103 # CREATIVE WRITING** A study of literary technique, practice in using a variety of devices, and production of complete imaginative compositions. (Prerequisite: ENG 1113, 1213)

**ENG 4113 # AGE OF SHAKESPEARE** Selected drama, poetry, and prose of the Early Modern period with an emphasis on Shakespeare. (Previously listed as SHAKESPEARE)

**ENG 4133 # HISTORY OF THE NOVEL** This course will trace the historical development of the novel in English from the 18th century to the postmodern period (Prerequisite: ENG 2413 for English majors; permission required for others)

**ENG 4203 # NON-FICTION WRITING** This course will focus on the study and practice of different forms of non-fiction writing such as the personal essay, memoir, nature writing, travel writing, writing for emerging technologies, and other forms related to a chosen theme or genre. (Prerequisite: ENG 1213)

**ENG 4213 # 18TH CENTURY LITERATURE IN ENGLISH** Selections of British and American literature written during the long eighteenth century (1660-1800) (Prerequisite: ENG 2413 for English majors, or permission from English department advisor)

**ENG 4233 # MODERN WORLD LITERATURE** The study of selected writers not necessarily in the same genre nor of the same nationality. Topics might include Existentialism, Post-War Japanese fiction, Latin American Magical Realism, etc. (Course may be repeated) (Prerequisite: ENG 2413 for English majors; permission required for others)

**ENG 4253 # WORLD LITERATURE** The study of selected writers of different nationalities, genres, and periods. (Prerequisite: ENG 2413 for English majors, permission required for others)

**ENG 4303 # FICTION WRITING** This course will focus on the study and practice of narrative development as it leads to the creation of character and the invention of plot in short works of fiction. (Prerequisite: ENG 1213)

**ENG 4313 # 19TH CENTURY LITERATURE IN ENGLISH** Selections of British and American literature in the 19th century. (Prerequisite: ENG 2413 for English majors, or permission from English department advisor)

**ENG 4323 # SELECTED BRITISH AUTHORS** A study of one or a selected group of writers not necessarily in the same literary genre. (Course may be repeated) (Prerequisite: ENG 2413 for English major, permission required for others)

**ENG 4343 # SELECTED AMERICAN AUTHORS** A study of the selected works of a single author or of a group of related authors, not necessarily in the same genre. (Course may be repeated) (Prerequisite: ENG 2413 for English majors, permission required for others)

**ENG 4383 # ADVANCED COMPOSITION** Expository composition with emphasis on technique, style, and audience. (Prerequisites: ENG 1113, 1213)

**ENG 4403 # WRITING AND VISUAL MEDIA** This course will focus on the study and practice of different forms of writing and visual media such as film, the internet, emerging technologies and other forms related to a chosen theme or genre. (Prerequisite: ENG 1213)

**ENG 4413 # 20TH&21ST CENTURY LITERATURE IN ENGLISH** Selections of British, American, Anglophone literature in the 21st century. (Prerequisite ENG 2413 for English majors or permission from English department advisor)

**ENG 4433 # NINETEENTH & TWENTIETH CENTURY WOMEN AUTHORS** An in-depth study of nineteenth- and twentieth-century women writers; includes the fiction, poetry, drama, and non-fiction prose of a variety of authors. (Prerequisite: ENG 2413 for English majors, permission required for others)

**ENG 4463 # AMERICAN ETHNIC LITERATURES** An investigation of the literature, art, and philosophy that tells of the encounters between "Western" and "non-Western" cultures by focusing on issues of national immigration and migration. (Prerequisite: ENG 2413 for English majors, permission required for others)

**ENG 4563 # NATIVE AMERICAN LITERATURES** This course is a survey of literature written by Native Americans. It may include works of fiction, non-fiction, poetry, drama, and literary criticism. (Prerequisites: ENG 1113 and ENG 1213)

**ENG 4663 # LITERARY THEORY AND CRITICISM** A study of selected literary critics, criticism, and critical theory from Aristotle to the present (Prerequisite: ENG 2413 for English majors, permission required for others)

**ENG 4783 # ENGLISH GRAMMAR** An intensive study of accounts of English structure and standards of usage. (Prerequisites: ENG 1113 and ENG 1213)

**ENG 4853 # GREAT BOOKS OF THE WESTERN WORLD** Central literary, historical, and philosophical works of the Western tradition from the ancient world to the Enlightenment. (Prerequisite: ENG 2413 for majors; permission required for others.)

**ENG 4863 COMPOSITION THEORY AND PRACTICE** Expository composition with emphasis on theory, technique, style, and audience, and the application of these to teaching. (Prerequisites: ENG 1113 and ENG 1213)

**ENG 4883 # HISTORY OF THE ENGLISH LANGUAGE** Historical development of sounds, vocabulary, inflections and syntax of the English language. (Prerequisites: ENG 1113 and ENG 1213)

**ENG 4893 # CHILDREN'S LITERATURE AND STORY TELLING** A study of the various types of literature appropriate for children, preschool through middle school. (Prerequisite: ENG 1213)

**ENG 4903 METHODS & MEDIA IN SECONDARY ENGLISH** An intensive study of pedagogical theories and their applications in Middle School and High School English classes. (Prerequisite: admission to Teacher Education. This course fulfills a professional education requirement.)

**ENG 4923 # MYTHOLOGY** A study of the origin and elements of myth. (Prerequisites: ENG 2143 for English majors, permission required for others)

**ENG 4943 # MIDDLE SCHOOL & HIGH SCHOOL LITERATURE** Middle and high school literature with emphasis on the modern period. Will also address "classic" literature for adolescents. (Prerequisite: ENG 2413 for English majors, permission required for others)

**ENG 4960 DIRECTED READING** Supervised reading in an area selected in consultation with professor directing.

**ENG 4970 SPECIAL STUDIES** Supervised research or project selected with advice of professor.

**ENG 4980 # SEMINAR** Research or reading seminar on subject announced by department.  
(Prerequisite ENG 1213)

**ENG 4990 RESEARCH** Supervised research on a topic selected in consultation with professor  
(permission required)

**ENG 5103 STUDIES IN AMERICAN LITERATURE** Advanced studies in American literature relating to such subjects as an author, a work, a genre, an idea, a critical principle, or an aesthetic theory. Topics to be announced by department (May be repeated)

**ENG 5113 RHETORIC FOR WRITTEN ENGLISH** Study and application of rhetorical principles on an advanced level.

**ENG 5203 STUDIES IN BRITISH LITERATURE** Advanced studies in British literature relating to such subjects as an author, a work, a genre, an idea, a critical principle, or an aesthetic theory. Topics to be announced by department. (May be repeated)

**ENG 5323 STRUCTURE & USE OF ENGLISH LANGUAGE** Advanced study of the structure of English sentences and their use in writing and speaking.

**ENG 5403 STUDIES IN WORLD LITERATURE** Advanced studies in world literature relating to such subjects as an author, a genre, an idea, a critical principle, or an aesthetic theory. Topics to be announced by department. (May be repeated)

**ENG 5533 STUDY AND APPLICATION OF LITERARY THEORIES** An intensive study of selected works of major literary critics from Aristotle to the present with practice in the application of literary theory to reading.

**ENG 5960 DIRECTED READINGS** Supervised reading in an area selected in consultation with professor directing.

**ENG 5970 SPECIAL STUDIES** Supervised research or project selected with advice of professor.

**ENG 5980 SEMINAR** Research or reading seminar on subject announced by department.

**ENG 5990 RESEARCH** Supervised research on a topic selected with advice or professor.

**ENTR 5103 ENTREPRENEURSHIP AND NEW VENTURE MANAGEMENT** This course focuses on all aspects of starting a new business venture from the ground up, including developing a business vision and mission, business feasibility analysis, organization, business research, small business marketing, and exit strategies.

**ENTR 5203 FINANCING NEW VENTURES** Entrepreneurs often encounter challenges in funding new business ventures and encounter different financial decisions than corporations. This course examines raising seed and growth capital, working with business angels and venture capitalists and well as commercial lenders with a focus on financial viability and also covers financial decision making for firms that are not publically traded.

**ENTR 5303 MARKETING FOR NEW VENTURES** Both small businesses and startups often lack sufficient funds for developing extensive marketing campaigns. This course examines various options for marketing a new business venture, along with the various aspects of marketing including market research, sales promotion, advertising, and use of social media.

**ENTR 5403 SPECIAL TOPICS IN ENTREPRENEURSHIP** This course is designed to provide students with the opportunity to study contemporary issues entrepreneurs currently face. Course topics change from



semester to semester that might include social entrepreneurship, global entrepreneurship for high tech companies, or participation in an applied business project.

**ENTR 5503 OPPORTUNITY AND NEW PRODUCT DEVELOPMENT** Entrepreneurial success can be dependent upon finding a new business opportunity and/or developing new products. In this course, students conduct an opportunity analysis and learn the key steps in developing new products.

**EUPH 1510 EUPHONIUM LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**EUPH 2510 EUPHONIUM LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**EUPH 3510 EUPHONIUM UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**EUPH 4510 EUPHONIUM UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**FIN 2633 PERSONAL FINANCE** Personal finance is intended to provide students with opportunities to develop skills for solving real world problems. It focuses on areas of study that address problems and applications in personal finance including financial planning, personal investing, budgeting, tax planning, real estate financing, credit management, insurance protection, and retirement and estate planning. Time value of money calculations are taught and applied to assist in making optimal choices.

**FIN 2733 PRINCIPLES OF REAL ESTATE** Introduces the history of organized real estate and Oklahoma license laws including rules, regulations, and professional standards. This course meets the minimum requirements necessary to qualify the student for licensure examination for an associate license in real estate.

**FIN 3113 BUSINESS FINANCE** In this course considers the basic financial decisions within a business. Topics include setting financial goals, measuring risk and return, time value of money, fundamentals of capital structure, fundamentals of dividend policy, sourcing funds, fundamentals of capital budgeting, fundamentals of stock and bonds and their valuation. (Prerequisites:ACCT 2103, 2203, ECON 2113, 2213, BUS 2633)

**FIN 3253 REAL ESTATE FINANCE** An in-depth analysis of financial concepts needed to make decisions to borrow, lend, or invest in real property. (Prerequisite: FIN 3113)

**FIN 3313 INTERMEDIATE CORPORATE FINANCE I** This course begins with fundamental concepts in corporate finance, including background on the economic and financial environment, financial statements, security valuation, and risk analysis. The first half of this course is focusing on the details that have not covered in business finance course. The second half covers important corporate decisions, including capital budgeting, working capital management, capital structure, and dividend policy, as well as agency theory and corporate governance. Prerequisite: FIN 3113 with a grade of C or better.

**FIN 3433 SECURITIES INVESTMENT** We consider investment theories and their applications in financial securities like stocks, bonds, mutual funds, real estate investment trusts, and venture capital funds. We also consider risk and the basics of modern portfolio theory. (Prerequisite: FIN 3113 with a grade of C or better)

**FIN 3523 FINANCIAL INSTITUTIONS AND CAPITAL MARKETS** This course Investigates the nature and characteristics of institutions, financial instruments, and markets that have evolved in the course of the domestic and global allocation of money capital. Topics include the importance of financial markets such as stock, bond, mortgage, futures, options and money markets. Additionally, the role and functioning of the Fed and major depository and non-depository financial institutions are covered. The role of markets and

government regulation in directing and efficient use of money capital and the use of derivative securities to reduce risks is emphasized.

**FIN 3633 ADVANCED PERSONAL FINANCE** Advanced Personal Finance is intended to provide students with opportunities to develop skills for solving real world problems. It focuses on areas of study that address problems and applications in personal finance including financial planning, personal investing, budgeting, tax planning, real estate financing, credit management, insurance protection, and retirement and estate planning. Time value of money calculations are taught and applied to assist in making optimal choices. For majors only

**FIN 4223 FINANCIAL ANALYSIS AND CONTROL** This course examines the processes and methods of financial analysis and control. The course emphasizes the objectives of different users of financial statements and describes analytical tools and techniques to meet those objectives. Analytical methods range from the computation of ratio and cash flow measures to forecasting earnings for equity valuation. Topics include cash flow analysis, profitability analysis, short-term and long-term forecasting analysis, credit analysis, and equity analysis and valuation. (Prerequisite: FIN 3113 with grade of C or better and ACCT 2203)

**FIN 4313 INTERMEDIATE CORPORATE FINANCE II** This course covers advanced topics in corporate finance, which begin with the reinforcement on the corporation's ultimate goal of value maximization. Topics discussed are financial forecasting, tactical financing decisions, financial options and real options, dynamic capital structure, mergers and acquisitions, enterprise risk management, bankruptcy, reorganization, and liquidation. Special topics including portfolio theory and multinational financial management are also covered. Prerequisite: FIN 3313.

**FIN 4323 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT** This course introduces students to the framework of the CFA Institute and then builds on previous course work to develop skills in applied portfolio management. To develop portfolio management techniques, students will cover the theory of active management, international diversification, optimal risky portfolios, managing bond portfolios, macroeconomic and industry analysis, financial statement analysis, equity valuation models, and futures, options, swaps and risk management techniques. (Prerequisite: FIN 3443, ACCT 4223 or FIN 4223)

**FIN 4443 # INTERNATIONAL FINANCIAL MANAGEMENT** This course focuses on the financial aspects of managing multinational firms. Topics include foreign trade flows, foreign capital flows, determinates of currency exchange rates, forecasting currency exchange rates, arbitrage, the use of derivative to manage exchange rate risk, and raising and investing long term funds internationally. (Prerequisite: FIN 3113 with grade of C or better for finance majors)

**FIN 4523 BANK ADMINISTRATION** This course investigates the daily operations, problems, and issues that confront bank managers. Case studies and computer simulation games are used to simulate the actual banking environment (Prerequisite: FIN 3523 with grade of C or better)

**FIN 4633 RISK MANAGEMENT** This course analyzes how businesses should manage risk. The course addresses how firms can use self-insurance and commercial insurance to insure against property, liability, and personnel risk. (Prerequisite: FIN 3113 with grade of C or better)

**FIN 4733 FINANCIAL MODELING** This course mixes explanation and implementation of quantitative analysis in finance using Microsoft Excel, one of the most widely used computational tools in the world. This course aims to strengthen finance students with solid understanding of fundamentals in multiple areas in finance. In addition, students will practice the quantitative analysis skills needed in the corresponding area through in class exercises and projects based on real world data. Consequently, students will then consolidate both knowledge and analytic skills. (Prerequisite: FIN 3113 with a grade of C or better)

**FIN 4813 FINANCIAL POLICY AND STRATEGY** This is the capstone course in finance. As such, the course integrates and synthesizes financial theories and applications considered elsewhere. The course

focuses on the executive level where managers make policy and strategic decisions that have lasting effects on the business. The course relies on spreadsheet analysis, internet-based simulations and case studies. (Prerequisite: FIN 3433, FIN 3313, and Seni or Standing)

**FIN 4950 INTERNSHIP** This course allows credit for approval internships under School of Business guidelines.

**FIN 4970 SPECIAL STUDIES** This course permits individual finance students to work with a finance professor on an approved topic in finance. (Prerequisite: FIN 3113 with grade of C or better and permission of department chair and the instructor)

**FIN 4980 SEMINAR** Small group study of topic announced by department (Prerequisite: FIN 3113 with grade C or better and permission of the instructor)

**FIN 5213 FINANCIAL MANAGEMENT** This course covers the practice and theory of managers making financial decisions for the firm. The basis for all decisions builds from the premise of maximizing shareholder wealth. Topics include risk and return tradeoffs, valuing stock and bonds, evaluating choices among sources of capital and capital structure, evaluating dividend policy, evaluating the selecting expansion projects, using derivative securities to managing risk, firm valuation, and short-term cash management. (Prerequisite: FIN 3113 and BUS 2633)

**FIN 5433 SECURITIES INVESTMENT** This course provides a solid foundation in investments and provides in-depth information about various money market and capital market investment vehicles such as stocks, bonds, mutual funds, UITs, REITs, EFTs, and other investment companies. The course also covers topics of investment importance such as how securities are traded, risk, valuation of fixed-income securities, fundamental security analysis, theoretical asset pricing models, portfolio performance evaluation, and information useful in practice such as brokerage accounts, buying on margin, and short selling.

**FIN 5543 INTERNATIONAL FINANCIAL MANAGEMENT** This course is designed to provide students with the theory and tools required to be successful managers in the field of international finance. In the first half of the course emphasis is placed upon: foreign exchange markets, balance of payment effects, theories of foreign exchange rate movements, forecasting exchange rates, and evaluating forecasts. In the second half of the course, the risks of foreign exchange fluctuation are classified and students will learn the methods to measure and hedge these risks from the viewpoint of the MNC. Fund raising in international money and capital markets, international working capital management, and investment practices of multinational firms will be covered.

**FLTE 1510 FLUTE LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**FLTE 2510 FLUTE LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**FLTE 3510 FLUTE UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**FLTE 4510 FLUTE UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**FREN 1113 # ELEMENTARY FRENCH I** Basic skills for either oral or written communication; grammar; written drills; reading of short selections, and audio-visual aids. Offered occasionally.

**FREN 1223 # ELEMENTARY FRENCH II** A continuation of FREN 1113; standard French grammar, reading of short French texts, and emphasis on oral participation. (Prerequisite: FREN 1113 or approval of instructor)

**GEOG 1713 # HUMAN GEOGRAPHY** An introduction to the major concepts of human geography examining geographic behavior in terms of spatial organization of the earth's surface and of the development of regional systems.

**GEOG 2713 # PHYSICAL GEOGRAPHY** A survey of physical geography and the relationship between man and his environment.

**GEOG 2723 # WORLD REGIONAL GEOGRAPHY** A comparative study of the cultural regions of the world.

**GEOG 3523 # GEOGRAPHY OF ANGLO-AMERICA** A cultural and economic study of the United States and Canada on a regional basis.

**GEOG 3533 # HISTORICAL GEOGRAPHY OF THE UNITED STATES** A study of the interaction of geography and history in the United States.

**GEOG 3543 # GEOGRAPHY OF OKLAHOMA** A survey of the physical and cultural environment of Oklahoma.

**GEOG 3713 # PRINCIPLES OF ECONOMIC GEOGRAPHY** A survey of the natural resources and the development of the resources by man.

**GEOG 3723 # WEATHER, CLIMATE, AND METEOROLOGY** A study of weather and the climatic elements with special study in meteorology.

**GEOG 3733 CONSERVATION OF NATURAL RESOURCES** A study of the methods of conservation and the importance to our natural resources.

**GEOG 3753 # WORLD POLITICAL GEOGRAPHY** A study of the world's critical areas where geographical and political factors interconnect.

**GEOG 4643 # GEOGRAPHY OF LATIN AMERICA** A study of the economic and cultural factors of the countries of Latin America.

**GEOG 4713 # GEOGRAPHY OF EUROPE** A cultural and economic study of the countries of Europe.

**GEOG 4723 # GEOGRAPHY OF ASIA** A comparative study of the cultural and economic factors of the countries of Asia.

**GEOG 4733 # GEOGRAPHY OF THE MIDDLE EAST AND AFRICA** A study of the cultural, economic, and physical geography of the Middle East and Africa.

**GEOG 4744 FIELD STUDIES** A two-to-three week summer tour of a specific region of the world.

**GEOG 4960 DIRECTED READING** Supervised readings in an area selected in consultation with professor directing.

**GEOG 4970 SPECIAL STUDIES** Supervised research with professor directing.

**GEOG 4980 SEMINAR** A study of specific topics in geography announced by department.

**GEOG 4990 RESEARCH** A micro-study of specific topics in geography.

**GEOG 5960 DIRECTED READINGS** Individual readings in geography determined by the professor.

**GEOG 5970 SPECIAL STUDIES** An intensive study of a particular aspect of geography.

**GEOG 5980 SEMINAR** Subject announced by department

**GEOG 5990 RESEARCH FOR MASTER'S THESIS**

**GERM 1113 # ELEMENTARY GERMAN I** Beginning course of basic linguistic skills with practice in listening, speaking, reading, and writing, pronunciation, phonetics and comprehension. Offered occasionally.

**GERM 1223 # ELEMENTARY GERMAN II** This course will provide further practice in listening, speaking, reading, and writing, with stress on mastery of lexical and structural items of German.

**HIS 5613 HEALTH INFORMATION SYSTEMS** This course is an introduction to the fundamentals of health information management using computer-based patient records. Key areas of study within health information management are addressed, with emphasis on the use of information as an asset to the health care provider. Included topics illustrate the importance of planning and setting procedures for proper storage, maintenance, usage, and security of health information records.

**HIS 5623 ELECTRONIC HEALTH RECORDS** This course introduces health information technology and develops the skills necessary to become successful users of medical practice management software. It prepares students to go into any medical office and perform medical practice management duties with the same or similar software as used in this course.

**HIS 5633 HEALTH INSURANCE AND MANAGED CARE** This course provides a working knowledge of medical insurance and its applications. Emphasis is placed on understanding insurance essentials, including the role of the medical insurance billing specialist and the laws and ethical guidelines of the field. Medical documents, coding diagnoses, and procedures are discussed. Students learn about the claims process, focusing on charges, methods of payments, billing and reimbursement. Other topics include private payers, Blue Cross and Blue Shield, Medicaid and Medicare, TRICARE and CHAMPVA, workers' compensation and disability insurance, hospital insurance, long-term insurance, and dental insurance. Finally, patient billing software is introduced and explored.

**HIS 5643 HEALTH POLITICS AND POLICY** This course emphasizes key concepts and knowledge regarding health politics and policy. Specifically, the course will provide an overview of the ethical and secure use of computer systems and data for the professional. Topics covered include ethical case studies, privacy, property rights, accountability and Internet issues as well as codes of ethics, professional conduct as published by technical organizations and best security practices. In addition, there is a focus on protecting computer resources from unauthorized access, establishing control to ensure the reliability of information processing, and auditing information systems to verify the accuracy of information systems.

**HIST 1513 # UNITED STATES HISTORY TO 1876** Survey of United States history from discovery to 1876.

**HIST 1523 # UNITED STATES HISTORY SINCE 1876** Survey of United States history from 1876 to present.

**HIST 2001 INTRODUCTION TO RESEARCH** A survey of the rudimentary search tools, forms of style, and logical developments of historical research and writing.

**HIST 2523 # OKLAHOMA HISTORY AND GOVERNMENT** Survey course in the formation of Oklahoma and Indian Territories and the coming of statehood.

**HIST 2713 # EARLY WORLD CIVILIZATIONS** Ancient civilizations in their cultural, political and economic aspects.

**HIST 2723 # MODERN WORLD CIVILIZATIONS** A survey of transitions of world societies from traditional to modern institutions.

**HIST 2980 # HISTORICAL SITE STUDIES** An integrated academic and experiential study of the culture, institutions, and people of selected historical sites. (3 credit hour maximum)

**HIST 3013 # MODERN EAST ASIA** Survey of the rise, decline, and development of modern Chinese and Japanese civilizations.

**HIST 3513 # UNITED STATES SOCIAL AND CULTURAL HISTORY** Development of institutions and culture in the United States from the colonial era to the present, with particular emphasis on intellectual history and the role of women in the United States.

**HIST 3523 # ECONOMIC HISTORY OF THE UNITED STATES** The history of the economic development in the United States.

**HIST 3533 # AMERICAN WEST** Study of the exploration, conquest, and development of the American West in the 19th century.

**HIST 3563 # AFRICAN-AMERICAN HISTORY** Detailed survey of the contributions of African-Americans from the colonial era to the present, with particular emphasis on the development and nature of slavery, and the struggle for equal rights.

**HIST 3573 # NATIVE AMERICAN HISTORY** A study of pre-Columbian to present day Native American history.

**HIST 3583 # AMERICAN ENVIRONMENTAL HISTORY** This course explores the role of the natural world in the formation and development of American society, culture, and politics. Emphasis is given to the importance of natural resources and the evolution of national perceptions and policies regarding the environment.

**HIST 3613 # MEXICO** Survey course from discovery and conquest of Mexico to present.

**HIST 3623 # ARGENTINA, BRAZIL, & CHILE** Survey of three of the most important of South American nations from discovery and conquest through present.

**HIST 3713 # ANCIENT WORLD** Study of the social, political, and cultural life of the ancient Near East, Greece, and Rome.

**HIST 3723 # ENGLAND TO 1689** Political, economic, cultural, and constitutional development of England from earliest times to 1689.

**HIST 3733 # ENGLAND SINCE 1689** Political, constitutional, economic and social development of England from the reign of William and Mary to the present.

**HIST 3753 # RUSSIA SINCE 1815** Russian civilization from 1815 to the present. Emphasis upon the corruption of imperial social institutions, the Revolutions of 1917, and the rise and fall of the Soviet Union.

**HIST 3793 # CULTURAL HISTORY OF THE WEST** A survey of the major developments in Western Culture from Antiquity to the Early Modern Period.

**HIST 3813 # HISTORY OF AFRICA** This course serves as a concentrated survey of African history from the dawn of civilization to the present, excluding only Ancient Egypt.

**HIST 4513 # COLONIAL AMERICAS, 1492-1763** An analysis of the formative period of colonial history in North America until the eve of the American Independence movement, encompassing: Exploration and Discovery, Settlement, and colonial society, culture, and politics until the conclusion of the French and Indian War.

**HIST 4523 # FOUNDING FATHERS AND THE COMMON MAN, 1763-1848** An examination of the political and cultural history of the United States from the struggle for Independence, the formation of a strong Federal Government, until Jacksonian Democracy.

**HIST 4533 # CIVIL WAR AND RECONSTRUCTION, 1848-1877** Background, conduct, and consequences of the Civil War, and an analysis of the problems of Reconstruction.

**HIST 4543 # GOSPELS OF NATIONALISM AND IMPERIALISM, 1877-1919** Society and culture from 1877 to 1919, with investigation of causes and results of imperialism.

**HIST 4553 # FLAPPERS, THE GREAT DEPRESSION, & WWII, 1919-1945** Politics, culture, and economics of the United States between the wars. Special attention given to the Great Depression and coming of WWII.

**HIST 4563 # CONTEMPORARY U.S. HISTORY, 1945-PRESENT** Detailed analysis of most outstanding characteristics of contemporary society.

**HIST 4593 # UNITED STATES DIPLOMATIC HISTORY** History of foreign policy of United States from revolutionary period to the present.

**HIST 4613 # LATIN AMERICA-COLONIAL PERIOD** Latin American history from discovery and exploration to national revolutions.

**HIST 4623 # LATIN AMERICA-NATIONAL PERIOD** Latin American history from the national revolutions to the present.

**HIST 4713 # BARBARIANS, CRUSADERS, AND PLAGUE:EUROPE 500-1300** The disintegration of the Medieval forms of life in Europe, and the transformation of intellectual and institutional ideas to 1300.

**HIST 4723 # MONARCHS, MINISTERS, & MERCHANTS:EUROPE 1300-1600** An examination of the economic, political, and socio-cultural developments in Europe during the 14th, 15th, 16th and early 17th centuries--emphasizing Renaissance and Reformation thought, the rise of Nation-states, and the birth of the Scientific Revolution.

**HIST 4743 # KINGS, PEASANTS, AND REVOLTS:EUROPE 1660-1815** An examination of the intellectual, political, and socio-cultural developments in Europe during the Age of Reason and Enlightenment--emphasizing Absolutism, the Enlightenment, and revolutionary and Napoleonic France.

**HIST 4753 # GOD, GUNS AND GLORY:EUROPE, 1815-1919** An examination of the domestic and international ramifications of Europe's transition from a traditional to a modern society.

**HIST 4763 # BLOOD AND FREEDOM: THE STRUGGLE FOR MODERN EUROPE** An analysis of modern Europe's maturation and the roles totalitarianism, democracy and hyper-nationalism played in two world wars, a Cold War and European Unification.

**HIST 4773 # PIRACY AND EMPIRE: ATLANTIC WORLD, 1400-1715** An examination of the economic, political and socio-cultural developments of the competition for the Atlantic World at sea--emphasizing the rise of trade, piracy, and conflict between English, Dutch, Portuguese, and Spanish maritime empires.

**HIST 4793 # GLOBAL HISTORY** A study of major governmental, economic, cultural, religious and military trends, from prehistory to the present, using primary sources.

**HIST 4953 HISTORICAL RESEARCH AND WRITING (CAPSTONE)** The senior capstone experience is required of all Social Studies majors. This research seminar, normally taken in the last year of enrollment, has been approved by the Oklahoma State Regents for Higher Education as a part of Southeastern Oklahoma State University's assessment plan. In the capstone, emphasis is placed on the principles of historical research, the organization of materials, and the discussion of various writing styles.

**HIST 4960 DIRECTED READING** Supervised reading in area selected in consultation with professor directing.

**HIST 4970 SPECIAL STUDIES** Supervised research or project selected with advice of professor.

**HIST 4980 SEMINAR** Research or reading seminar on topic announced by department.

**HIST 5960 DIRECTED READINGS** Individual studies in history determined by the professor.

**HIST 5970 SPECIAL STUDIES** An intensive study of a particular aspect of history determined by the needs of the student as identified by the professor.

**HIST 5990 HISTORICAL RESEARCH, WRITING, AND/OR THESIS** Historical research, writing, and/or thesis.

**HON 3113 # LOCAL HABITATIONS** This course takes both a broad, contextual view and a detailed look at the community through an academic lens. Using the City as Text pedagogical model, students will examine how their viewpoints have been structured by regional, national, and international cultures by investigating their geography. They will examine the relationships between texts, places, and people while engaging with the university and greater local community.

**HON 4712 SENIOR SEMINAR** Students pursue a multidisciplinary research project through a peer-review process and public dissemination. Students will use their grounding in history, communication, psychology, anthropology, philosophy, logic, and literary and cultural studies (i.e. the honors curriculum) to articulate and discuss the broader community relevance of their individual major expertise.

**HRN 1510 HORN LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**HRN 2510 HORN LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**HRN 3510 HORN UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**HRN 4510 HORN UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**HUM 2113 # EARLY HUMANITIES** Unity of philosophy and the arts in the ancient and medieval world. Emphasis on relevance to present life.

**HUM 2223 # MODERN HUMANITIES** Philosophy and the arts as human responses to the challenges of the modern world.

**HUM 2313 # INTRODUCTION TO LITERATURE** Study of selected literary works, with emphasis on both understanding literary forms and grasping literature as commentary on life. (Same as ENG 2313)

**HUM 2453 # PHILOSOPHY IN LIFE** Informal examination of the range of philosophic efforts to clarify the dilemmas of life.

**HUM 4980 SEMINAR** Content varies according to the time and need.

**HUM 5113 ADVANCED HUMANITIES STUDY** Intensive study of selected areas of the cultural achievements of mankind.

**HUM 5980 SEMINAR** Content varies according to the time and need.

**KIN 1113 # WELLNESS AND POSITIVE LIFE STYLES** A study involving the integration of principles of health and wellness that expand one's potential to make informed choices about life styles. Lectures with corresponding laboratory experiences are designed to aid students in personal fitness and wellness development.



**KIN 2001 INTERCOLLEGIATE FOOTBALL** Varsity participation. (Five days a week in season. Maximum credit of four hours)

**KIN 2101 INTERCOLLEGIATE BASKETBALL** Varsity participation. (Five days a week in season. Maximum credit of four hours)

**KIN 2111 INTERCOLLEGIATE WOMEN'S BASKETBALL** Varsity participation. (Five days a week in season. Maximum credit of four hours.)

**KIN 2201 INTERCOLLEGIATE BASEBALL** Varsity participation. (Five days a week in season. Maximum credit of four hours)

**KIN 2401 INTERCOLLEGIATE TENNIS** Varsity participation. (Five days a week in season. Maximum credit of four hours)

**KIN 2411 INTERCOLLEGIATE WOMEN'S TENNIS** Varsity participation. (Five days a week in season. Maximum credit of four hours.)

**KIN 2501 INTERCOLLEGIATE GOLF** Varsity participation. (Five days a week in season. Maximum credit of four hours)

**KIN 2601 WEIGHT TRAINING AND CONDITIONING** Physical conditioning program consisting of weights and jogging.

**KIN 2651 SPECIALIZED RECREATIONAL ACTIVITIES** (Subject named in title listing. Course may be repeated under a different subject.)

**KIN 2662 SURVEY OF HEALTH, PHYSICAL EDUCATION & RECREATION** This course is designed to give the prospective teacher of Physical Education/Health and/or the Recreation specialist an insight into the area of specialization. Personal fitness assessment, trends and issues, and portfolio requirements in the respective programs will be addressed.

**KIN 2701 INTERCOLLEGIATE WOMEN'S CROSS COUNTRY** Varsity participation. (Five days a week in season. Maximum credit of four hours.)

**KIN 2752 FIRST AID AND SAFETY** This course provides knowledge and practical experience in emergency care.

**KIN 2801 INTERCOLLEGIATE WOMEN'S SOFTBALL** Varsity participation. (Five days a week in season. Maximum credit of four hours.)

**KIN 2901 INTERCOLLEGIATE WOMEN'S VOLLEYBALL** Varsity participation. (Five days a week in season. Maximum credit of four hours.)

**KIN 3113 SCHOOL AND COMMUNITY HEALTH** A study of procedures leading to the solution of health problems found in the school and community.

**KIN 3142 RECREATION SPORTS PROGRAMS** This course is designed to study the objectives and principles in administering recreational sports programs in schools and in the community. The course offers an exploration and examination of theoretical foundations and basic sport programming skills, methods, and techniques necessary to deliver recreational sports activities within a variety of settings, agencies and/or organizations

**KIN 3152 CAMP COUNSELING** Organization and administration of camping experiences and the study of counseling techniques.

**KIN 3242 SPORTS/RECREATION FACILITIES MANAGEMENT** The course is designed to present information regarding management of recreation facilities in the public and private sectors. The course will focus on the facility manager's role and responsibilities.

**KIN 3252 MOTOR LEARNING AND DEVELOPMENT** This course is a study of the development of movement skills in humans from infancy to older adulthood and how differing motor, cognitive, and social abilities affect skill acquisition.

**KIN 3352 MEASUREMENT AND EVALUATION** Measurement and evaluation techniques applicable to school physical education and exercise settings.

**KIN 3462 ADAPTED PHYSICAL EDUCATION** This course is designed to examine the need for programs adapted for individuals with atypical physical needs and to focus on awareness and knowledge of various types of conditions, symptoms, and characteristics of said individuals. Emphasis is given to the organization and development of programs adapted for individuals with physical challenges.

**KIN 3473 # APPLIED ANATOMICAL KINESIOLOGY** An in-depth study of the human musculoskeletal system; examining each joint, the associated muscles, and the movements produced. Emphasis is given to the application to human movement, to athletic performance, and to injury prevention.

**KIN 3553 ELEMENTARY SCHOOL PROGRAM** Methods and teaching techniques in preparation for teaching physical education to elementary school students.

**KIN 3652 RECREATIONAL LEADERSHIP** Techniques of group leadership; interpretation of leadership; analysis of problems at various levels; and examination of methods of leadership.

**KIN 3753 TECHNIQUES OF TEACHING TEAM SPORTS AND GYMNASTICS** Teaching and performance techniques of team sports and gymnastics. Includes but not limited to volleyball, soccer, flag football, softball, track and field, and gymnastics.

**KIN 3763 TECHNIQUES OF TEACHING LIFETIME ACTIVITIES** Teaching and performance techniques of lifetime activities. Includes but not limited to tennis, golf, dance, camping, backpacking and hiking.

**KIN 3852 SPORTS RULES AND OFFICIATING** Techniques of officiating football, basketball and baseball. Laboratory work required.

**KIN 4053 ORGANIZATION AND ADMINISTRATION** Administrative techniques and sound management principles utilized in physical education, intramurals, intercollegiate, and health education programs.

**KIN 4152 COMMUNITY RECREATION** Study of the scope of recreation, activities appropriate for a community wide program, survey of facilities and opportunities, and planning.

**KIN 4253 # PHYSIOLOGY OF EXERCISE** This course provides an introduction to the physiological considerations of the human organism in response to physical activity.

**KIN 4263 # ADVANCED PHYSIOLOGY OF EXERCISE** This course provides students with an advanced level of understanding of exercise physiology. It emphasizes the acute and chronic effects of exercise on various physiological systems in adults and the integrative nature of these physiological responses. Prerequisite: HPER 4253

**KIN 4273 EXERCISE TESTING AND PRESCRIPTION** This course introduces the basic knowledge regarding the methodology of exercise testing and exercise prescription. Specific emphasis will be placed on knowledge pertaining to the ACSM Health Fitness Instructor Certification Exam. Successful completion of this course results in having the understanding and skills necessary to administrate exercise testing and prescription in both the commercial and clinical setting. This course is designed for majors who wish

topursue a career in either cardiac rehabilitation or corporate fitness. Content centers on both healthy and special populations with a variety of abilities and disabilities.

**KIN 4283 HUMAN PERFORMANCE LABORATORY** This course is designed to provide introductory knowledge and experience in collecting and analyzing human physiological data in response to physical activity and exercise. The knowledge gained in this course is useful to any individual seeking to better comprehend the acute response and chronic adaptation of humans to physiological stress. This course is particularly valuable to students pursuing a career in the exercise sciences.

**KIN 4353 # FOUNDATIONS OF PHYSICAL EDUCATION** Brief history of health and physical education; scientific and philosophic foundations for modern program construction.

**KIN 4363 # FOUNDATIONS OF RECREATION** This course is planned to provide a thorough description of the current scope and organizational practices as well as the historical, sociological, psychological, philosophical and economic aspects of recreation and leisure.

**KIN 4402 PRINCIPLES OF ATHLETIC COACHING** This course is designed to introduce the coaching/teacher candidate to the basic knowledge needed to be successful in the coaching field. The various responsibilities and roles of head coaches and assistant coaches will be examined.

**KIN 4413 PRINCIPLES OF STRENGTH AND CONDITIONING COACHING** This course is designed to provide a comprehensive overview of developing strength and conditioning programs for diverse populations. Emphasis is placed on designing programs for the development of physiological attributes required for performance of a variety of physical activities. (Previously listed as KIN 4412 (HPER))

**KIN 4502 COACHING FOOTBALL** Basic fundamentals and techniques in coaching the three major areas of football--offense, defense, and the kicking games as well as practice, organization, and game situations.

**KIN 4512 COACHING BASKETBALL** Methods of coaching individual and team offensive and defensive skills as well as practice, organization, and game situations.

**KIN 4602 COACHING BASEBALL** Theory of coaching offensive and defensive fundamentals, practice, organization, and game situations.

**KIN 4632 COACHING SOFTBALL** This course examines the basic fundamentals and techniques in coaching offensive and defensive skills as well as planning practices, organizing schedules, hiring officials, planning travel, handling game situations, and investigating strategies in the sport of softball.

**KIN 4642 COACHING VOLLEYBALL** This course examines the basic fundamentals and techniques in coaching offensive and defensive skills as well as planning practices, organizing schedules, hiring officials, planning travel, handling game situations, and investigating strategies in the sport of volleyball.

**KIN 4802 CARE AND PREVENTION OF ATHLETIC INJURIES** The course provides instruction in areas such as injury/illness prevention, first aid and emergency care, assessment of injury/illness, human anatomy and physiology, therapeutic modalities, and nutrition. Clinical education experiences afford hands-on practice and reinforcement of techniques studied (Lab fee)

**KIN 4813 NUTRITION AND WEIGHT MANAGEMENT** This course will explore some of the aspects of weight control; why individuals gain weight, why some individuals need to lose weight, how individuals can lose weight, and how weight loss can be maintained. Metabolism, food consumption, and exercise, as related to weight control, will be considered and discussed.

**KIN 4823 NUTRITION IN SPORTS** This course examines the study of nutrition as it relates to human energy production, energy substrate utilization during exercise, fitness, and sports performance. Special emphasis is given to energy needs for specific types of physical activity, current theories related to weight

gain/loss, the relationships between diet and training for optimal performance, and sports performance enhancing substances. (Previously listed as KIN 4822 (HPER))

**KIN 4833 STRESS MANAGEMENT** This course is designed to introduce various techniques utilized to successfully manage stress. Information about stress, anger management, relaxation techniques, and coping skills is included.

**KIN 4842 # PSYCHOLOGY OF SPORT** This course is designed to introduce the history and evolution of sports psychology. The course identifies various personality traits and the impact these traits have on sport performance. Specific traits of aggression, confidence, and anxiety will be investigated. The course also addresses the dynamics involved in the structure of a team.

**KIN 4852 FITNESS FOR LIFE** The course is designed to investigate nutrition, weight training, and aerobic activities as components of a healthy lifestyle. The intent of the course is to persuade students to engage in healthy living for a lifetime.

**KIN 4903 METHODS IN PHYSICAL EDUCATION AND HEALTH** A theory and practice course focusing on organizational and instructional techniques, discipline strategies, and class management. (Will not count toward a major or minor in Physical Education.) (Prerequisite: admission to Teacher Education)

**KIN 4954 SUPERVISED RECREATIONAL FIELD WORK** Work experiences in recreational programs. (Departmental permission required)

**KIN 4963 PRACTICUM** The practicum is intended to provide the opportunity to apply and expand the knowledge and skills learned in the academic program with actual clients/consumers, to promote the development of self-evaluation and problem solving skills, and to acquaint students with different career/practicum opportunities that exist within the field of Exercise Science.

**KIN 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Departmental permission required.)

**KIN 4980 SEMINAR** (Departmental permission required)

**KIN 4990 RESEARCH** Independent research designed in consultation with the professor. (Departmental permission required)

**KIN 5003 SPORT AND SOCIETY** Review and analysis of sociological phenomena related to sport.

**KIN 5023 FOUNDATIONS OF SPORT AND EXERCISE SCIENCE** A cross-disciplinary course that provides students with a broad foundation of the various sub-disciplines of sport and exercise science including the anatomical, biomechanical, physiological, nutritional, and psychological bases of human movement.

**KIN 5053 APPLIED RESEARCH METHODS AND STATISTICS IN SPORTS** A study of research methodology and literature related to sport. The course is designed to develop correct application of research methods and statistical process decision-making relative to continuous improvement in coaching and sport management.

**KIN 5103 ADMINISTRATION OF ATHLETICS** Problems, policies, and procedures involved in the administration of athletics.

**KIN 5113 SPORT MANAGEMENT, FINANCES AND FUND RAISING** This course is designed to study the management, financing, marketing and sponsorships of sport programs.

**KIN 5123 FACILITY PLANNING AND EVENT MANAGEMENT** A study in the planning and developing of sport facilities as well as event management.

**KIN 5203 ADVANCED MEASUREMENT IN PHYSICAL EDUCATION** Study of standardized tests, construction of tests, and a survey of research studies.

**KIN 5303 CONTEMPORARY ISSUES** A study of current issues involving philosophical and administrative issues in physical education and sport.

**KIN 5403 SCIENTIFIC BASIS OF MOTOR SKILLS** Research implications relating to the application of learning theories to the teaching of motor skills.

**KIN 5503 MOVEMENT EDUCATION** History, overview, and program planning. Emphasizes movement as the basis for learning.

**KIN 5603 LEGAL ASPECTS** Legal aspects of sport administration, coaching, and teaching physical education. Topics include the analysis of legal issues such as liability, negligence, risk management, tort law, and application of sport law.

**KIN 5703 PROBLEMS IN HEALTH EDUCATION** A survey of current health education problems with in depth coverage of major topics.

**KIN 5753 SPORT NUTRITION** The study of nutrition as it relates to human energy production, utilization during exercise, fitness, and sports performance. Special emphasis is given to energy needs for specific types of physical activity, current theories related to weight gain/loss, the relationships between diet and training for optimum performance, and sports performance enhancing substances.

**KIN 5843 ADVANCED DEVELOPMENT OF STRENGTH & CONDITIONING PROGRAM** The theoretical and practical applications of strength training and conditioning. Special emphasis is given to the development of sport and event specific strength and conditioning programs, sports specific performance demands, and individual performance optimization. Programs shall be based upon the performance requirements associated with musculoskeletal strength and flexibility, body composition, cardiovascular endurance, and nutritional recommendations.

**KIN 5853 BIOMECHANICS OF SPORT TECHNIQUES** Applies the principles and mechanics of motion to a variety of physical activities. Fundamental movements necessary for the successful execution of a variety of techniques.

**KIN 5863 SKILLS, TECHNIQUES, AND STRATEGIES FOR COACHING** Methods of teaching sport skills in a variety of sports. The purpose is to promote athletes' growth, development, and learning in all areas of sports. A study of the trends and issues related to the development and maintenance of athletic abilities in a variety of sports.

**KIN 5873 ADVANCED CARE AND TREATMENT OF ATHLETIC INJURIES** Recognizing and caring for sport injuries. Examining purposes and procedures for adequate care of injured athletes. An advance investigation into Health Care Administration, Legal Liability, Care, Prevention and Rehabilitation of Athletic Injuries.

**KIN 5903 ADVANCED THEORY OF COACHING FOOTBALL** Advanced offensive and defensive techniques and game strategies in football.

**KIN 5953 ADVANCED THEORY OF COACHING BASKETBALL** Individual skills and their incorporation into game strategy. Comparative examination of offenses and defenses.

**KIN 5960 DIRECTED READINGS** Individualized study selected in consultation with the professor. (Prerequisite: Permission required)

**KIN 5970 INDIVIDUAL STUDY IN SPORTS STUDIES AND ATHLETIC ADMINISTRATION**

**KIN 5980 SEMINAR IN SPORTS STUDIES AND ATHLETIC ADMINISTRATION**

**KIN 5990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: permission required)

**LANG 1113 # INTRODUCTION TO EUROPEAN LANGUAGES** This course presents an overview of the structure and phonology of five major Western European languages: Latin, French, German, Italian, and Spanish.

**LANG 4903 METHODS & MEDIA** An intensive study of foreign language pedagogy, including second language acquisition, national standards, professionalism, and specific techniques and strategies for teaching and assessing student learning in foreign languages. (Prerequisites: Admission to Teacher Education, grade of C or better in SPAN 4163, and passing score on Oklahoma Subject Area Test in Spanish)

**LEAD 1113 FUNDAMENTALS OF LEADERSHIP** An introduction to leadership theories, types of leaders, characteristics of successful and unsuccessful leaders, basic tools leaders can use in supervisory positions, and motivational techniques.

**LEAD 1123 COMMUNICATION IN LEADERSHIP** A study of generational diversity and the differences in behavior that arise from that diversity in the workplace. The course also examines how to communicate effectively with diverse generations.

**LEAD 1133 LEADERSHIP PERFORMANCE** This course is a study of how to identify both organizational and individual goals, develop active listening skills, assess your own personal coaching style as it relates to leadership, and incorporate standards and methods in the performance of daily tasks.

**LEAD 1143 INTRODUCTION TO RESOURCE MANAGEMENT** This course examines the primary function of a leader in a supervisory role, the different levels of management in an organization, the different theories of people management, the organizational systems for project prioritization and time management, and the function of an action plan.

**LEAD 2103 FOUNDATIONS OF LEADERSHIP** This course incorporates leadership theory, types of leaders and characteristics of successful leaders.

**LEAD 2123 MANAGING CONFLICT** This course incorporates problem-solving identification and techniques, approaches to problem solving, the five "whys" of root cause analysis and writing problem statements.

**LEAD 2133 CULTURAL COMMUNICATION** This course incorporates definitions of communication styles across differing cultures and presents strategies and best practices for organizing and conducting group meetings.

**LEAD 2143 FUNDAMENTALS OF PERFORMANCE MANAGEMENT** This course is designed to develop business coaching skills, including defining the role of a coach, developing expectations, receiving feedback, and managing others in a variety of work-related situations.

**LEAD 2153 ORGANIZATIONAL PLANNING** This course is designed to develop organizational planning skills, including understanding a SWOT analysis, planning and assigning roles, and creating and implementing a strategic planning process.

**LEAD 3143 TRANSFORMATIONAL LEADERSHIP** This course analyzes various business leadership styles, defines transformational leadership qualities, and helps the student to develop effective relationship models for a generationally diverse workplace.

**LEAD 3153 PERFORMANCE-DRIVEN TEAMS** This course identifies and analyzes various personality types within an organization and applies principles of performance to business settings.

**LEAD 3163 ADVANCED PERFORMANCE MANAGEMENT** This course analyzes the performance management process within organizations and presents opportunities to create a coaching culture in the workplace.

**LEAD 3173 RESOURCE ALLOCATION AND MANAGEMENT** This course serves to introduce Maslow's Hierarchy of Needs into enthusiasm and reward situations, demonstrates conflict management solutions in the workplace, and provides opportunities to discover and apply time management logs, tables, and grids.

**LEAD 3183 ORGANIZATIONAL BEHAVIOR** This course is designed to introduce and investigate the three steps of strategic planning, create, and develop a strategic planning cycle, and build a ten-year sustainability model within a large organization.

**LEAD 4113 VISIONARY LEADERSHIP** This course covers the characteristics of visionary leaders, investigates Emotional Intelligence and its role within the leadership of an organization, and analyzes Visionary Leadership Self-Assessment models.

**LEAD 4123 ORGANIZATIONAL LEADERSHIP (CHOCTAW NATION)** This course directly identifies the Mission and Values of the Choctaw Nation of Oklahoma, identifies and assesses the core values of the tribal nation, and develops presentational skills promoting the Choctaw Nation of Oklahoma.

**LEAD 4133 LEADING ORGANIZATIONAL PERFORMANCE** This course introduces the performance planning process and the rewards program for departments within an organization, identifies the vision, mission, and culture of an organization, and set alignments for those areas.

**LEAD 4143 BENCHMARKING PERFORMANCE** This course identifies strategies for leading during times of organizational crisis, develops succession planning strategies, and identifies and compares performance and potential for performance in departments within an organization.

**LEAD 4153 LEADING ORGANIZATIONAL SYSTEMS** This course identifies and implements the steps involved in creating a strategic plan, creates metrics to analyze successes and challenges within an organizational system, and assesses both the strategic plan and metrics for viability in an organization.

**LEAD 4950 LEADERSHIP INTERNSHIP** Supervised professional-level leadership assignment with a business firm, government agency, or non-profit organization. (Prerequisite: department approval)

**LEAD 4980 SEMINAR** Small group study of topic announced by department.

**LEAD 4990 RESEARCH PRACTICUM** Independent investigation designed in consultation with the professor.

**LEAD 5980 SEMINAR** Small group study of topic announced by department.

**MATH 0114 ELEMENTARY ALGEBRA** A course for students with little or no previous algebra background. Topics include arithmetic review, real number operations, linear equations and inequalities, polynomial operations, rational expressions, and square roots. (No college credit.)

**MATH 0123 INTERMEDIATE ALGEBRA** A course for students who need to review algebra skills. Topics include real number operations, linear equations and inequalities, polynomial operations, rational expressions, and radical expressions. (No college credit.)

**MATH 1103 MATH FOR ELEMENTARY MAJORS I** Structure of the rational number system. (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

**MATH 1203 MATH FOR ELEMENTARY MAJORS II** Applications of the structure of the rational number system to algorithms. (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

**MATH 1213 # ALGEBRA FOR COLLEGE STUDENTS** Real number system, linear equations, polynomials, inequalities, systems of equations.

**MATH 1303 # MATHEMATICS IN THE LIBERAL ARTS** Set theory, logic, finite systems, number sequences, counting techniques, algebra, geometry. [Prerequisite: Either (a) Math ACT of at least 19, (b) a passing score on the Math CPT exam, or (c) MATH 0114 or MATH 0123.]

**MATH 1403 APPLIED TRIGONOMETRY** A course designed for the technical/occupational student, with emphasis on the application of trigonometry in developing basic concepts and computational aspects of plane and solid geometry and complex numbers.

**MATH 1513 # COLLEGE ALGEBRA** The study of functions, systems of equations, theory of equations, sequences and series, matrices and determinants, combinatorics. (Prerequisite: MATH ACT of at least 19 or a passing score on the departmental placement exam or MATH 0123.)

**MATH 1543 # ALGEBRA FOR THE SCIENCES** An introduction to critical thinking and algebra skills necessary for the natural sciences. Emphasis is on applications. [Prerequisite: Either (a) Math ACT of at least 19, (b) a passing score on the departmental placement exam, or (c) MATH 0114, or (d) MATH 0123]

**MATH 1613 # TRIGONOMETRY** Trigonometric and inverse functions, vectors, identities, complex numbers, exponential and logarithmic functions and applications. (Prerequisite: MATH 1513 or equivalent)

**MATH 2003 TECHNOLOGY FOR MATHEMATICS** An introduction to some of the technology used in the practice and teaching of mathematics. Topics covered include graphing calculators, computer algebra systems, mathematics on the World Wide Web, and other appropriate software applications. (Prerequisite or Corequisite: MATH 1613 or equivalent)

**MATH 2013 # INTRODUCTION TO DISCRETE MATH** Mathematical induction, relations, functions, combinatorics, graph theory, trees, and finite state automata. (Prerequisite: CS 1313)

**MATH 2113 # ANALYTIC GEOMETRY** Cartesian coordinate system, conics, parametric equations, transformation of axes, introduction to solid analytic geometry. (Prerequisite: MATH 1613 or departmental approval)

**MATH 2133 BUSINESS MATH** Decimals, percentage, marketing and accounting mathematics, interest, depreciation, taxes.

**MATH 2143 # BRIEF CALCULUS WITH APPLICATIONS** An introduction to the calculus of elementary functions, with an emphasis on applications in Business and the Life Sciences. (Prerequisite: MATH 1513 or MATH 1543 or equivalent) (Will not count towards a major in mathematics or mathematics education.)

**MATH 2215 # CALCULUS I** Functions, limits, derivatives, integrals, differentiation and integration of transcendental functions, applications. (Prerequisite: MATH 1613 or MATH 2113 or departmental approval)

**MATH 2283 # INTRODUCTION TO LOGIC** Study of the syllogism, fallacies, symbolic logic, and developments in logic in the 20th century. (NOTE: This is an Honors class and permission is required.)

**MATH 2315 # CALCULUS II** Techniques of integration, improper integrals, infinite series, parametric equations, vector functions, partial differentiation, multiple integration, line and surface integrals, applications. (Prerequisites: MATH 2215)

**MATH 3023 METHODS IN MATHEMATICS AT THE PRIMARY LEVEL** Study of mathematical concepts for the primary grades and methods of teaching these concepts. (Prerequisite: MATH 1303) (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)



**MATH 3033 METHODS IN MATHEMATICS AT THE INTERMEDIATE LEVEL** Study of mathematical concepts for the intermediate grades and methods of teaching these concepts. (Prerequisite: MATH 1303) (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

**MATH 3113 # MULTIVARIATE CALCULUS** Partial differentiation, multiple integration, topics from vector calculus, introduction to first and second order differential equations. (Prerequisite: MATH 2315)

**MATH 3123 # FINITE MATHEMATICS FOR ELEMENTARY MAJORS** Study of number theory, probability, and statistics for elementary education majors. (Prerequisites: MATH 1303, one of MATH 1513 or MATH 1543.) (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

**MATH 3133 # GEOMETRY FOR ELEMENTARY MAJORS** Study of geometry concepts such as measurement, congruence, constructions, lines and circles for elementary education majors. (Prerequisites: MATH 1303, one of MATH 1513 or MATH 1543) (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

**MATH 3213 # DIFFERENTIAL EQUATIONS** Introduction to the theory of ordinary differential equations. (Prerequisite: MATH 2315)

**MATH 3283 # FOUNDATIONS OF MATHEMATICS** Proof techniques, functions, relations, countable and uncountable sets. (Prerequisite: MATH 2315 or departmental approval)

**MATH 3323 # COLLEGE GEOMETRY** Elementary concepts of Euclidean geometry, introduction to non-Euclidean geometries. (Prerequisites: MATH 2315)

**MATH 3343 # NUMBER THEORY** Divisibility of integers, congruencies, quadratic residues, mathematical induction, distribution of primes, Diophantine equations, numerical functions, continued fractions. (Prerequisite: MATH 3283)

**MATH 4113 # REAL ANALYSIS** Functions, sequences, limits, continuity, differentiation, integration. (Prerequisite: MATH 3283)

**MATH 4133 # LINEAR ALGEBRA** An introduction to matrices, vector spaces, linear transformations, and eigen values. (Prerequisite: MATH 2215)

**MATH 4213 # COMPLEX VARIABLES** Complex numbers, analytic functions, elementary functions, integrals, series, residues, conformal mappings. (Prerequisite: MATH 3283)

**MATH 4223 # POINT SET TOPOLOGY** Introductory topics in point set topology. (Prerequisite: MATH 3283)

**MATH 4233 # ABSTRACT ALGEBRA I** Sets, mappings, groups, rings, integral domains, fields. (Prerequisite: MATH 3283)

**MATH 4333 # ABSTRACT ALGEBRA II** A continuation of Abstract Algebra I. (Prerequisite: MATH 4233)

**MATH 4523 # COMBINATORICS** Permutations and combinations, enumeration, generating functions, systems of distinct representatives, algorithms, graph theory, design theory, Ramsey theory. (Prerequisite: MATH 2013 or MATH 2215)

**MATH 4543 MATHEMATICS OF FINANCE** Interest, annuities, amortization, sinking funds, perpetuities, bonds, depreciation, insurance.

**MATH 4653 # HISTORY OF MATHEMATICS** Origins, philosophy, and chronological development of the mathematical sciences. (Prerequisite: MATH 2215)

**MATH 4703 MATHEMATICS METHODS FOR ELEMENTARY MAJORS** Study of methods of teaching concepts encountered in the elementary school curriculum. (Prerequisites: MATH 3123 and 3133) (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

**MATH 4903 METHODS & MEDIA IN SECONDARY MATHEMATICS** Development of secondary mathematics in the United States, general aspects of the teaching of mathematics, study of teaching various high school math courses. (Will not count toward a major or minor in mathematics. Prerequisite: admission to Teacher Education)

**MATH 4960 DIRECTED READING**

**MATH 4970 SPECIAL STUDIES**

**MATH 4980 SEMINAR**

**MATH 4990 RESEARCH**

**MATH 5113 PRINCIPLES OF MATHEMATICS** Sets, real number properties, intuitive geometry, measurement, and other topics appropriate for teachers of Elementary School Mathematics. (Will not count toward the M.Ed. in Secondary Education)

**MATH 5133 THEORY OF INFERENCES** Topics in logic with emphasis on applications of principles of valid reasoning to problems encountered in various disciplines.

**MATH 5223 MATHEMATICAL STRUCTURES I** Topics from modern and classical algebra with emphasis on the structure of the real number system.

**MATH 5273 TOPICS IN MATH FOR THE ELEM SCHOOL** Geometry, number theory, problem solving techniques, curriculum development. (Will not count toward the M.Ed. in Secondary Education).

**MATH 5323 MATHEMATICAL STRUCTURES II** Study of mathematical systems: groups, rings, integrals, domains, fields.

**MATH 5343 GEOMETRICAL STRUCTURES I** Euclidean geometry as a mathematical system and as a source of mathematical models.

**MATH 5443 GEOMETRICAL STRUCTURES II** Theory of incidence geometries, introduction to projective and affine geometrics.

**MATH 5513 THE TEACHING OF ALGEBRA AND FUNCTIONS** Learning and teaching concepts of algebra in a problem-based, student-centered environment, incorporating technology and manipulatives where appropriate. Participants will develop a deeper understanding of key ideas through discussion and evaluation of solution methods of peers and analysis of student work.

**MATH 5523 THE TEACHING OF NUMBER AND OPERATIONS** Learning and teaching number and operations in a problem-based, student-centered environment, incorporating technology and manipulatives where appropriate. Participants will develop a deeper understanding of key ideas through discussion and evaluation of solution methods of peers and analysis of student work.

**MATH 5533 THE TEACHING OF GEOMETRY AND MEASUREMENT** Learning and teaching geometry and measurement in a problem-based, student-centered environment, incorporating technology and manipulatives where appropriate. Participants will develop a deeper understanding of key ideas through discussion and evaluation of solution methods of peers and analysis of student work.

**MATH 5543 MATHEMATICAL PROBLEM SOLVING FOR TEACHERS** An introduction to mathematical problem solving through a series of exploratory problems designed to give teachers an insight into problem solving.

**MATH 5553 TEACHING OF DATA ANALYSIS, STATISTICS, & PROBABILITY** Learning and teaching data collection and analysis, statistics, and probability in a problem-based, student-centered environment, incorporating technology and manipulatives where appropriate. Participants will develop a deeper understanding of key ideas through discussion and evaluation of solution methods of peers and analysis of student work.

**MATH 5593 PROBLEMS AND ISSUES IN MATHEMATICS EDUCATION** Current problems and issues in mathematics education. Possible topics include: planning mathematics curriculum; assessing student learning; accountability and high-stakes testing; managing instruction; and providing for individual student needs.

**MATH 5623 ANALYSIS** Functions, sequences, limits, continuity and other topics from elementary real analysis.

**MATH 5960 DIRECTED READINGS**

**MATH 5970 SPECIAL STUDIES**

**MATH 5980 SEMINAR**

**MATH 5990 RESEARCH FOR MASTER'S THESIS**

**MKT 3233 PRINCIPLES OF MARKETING** A study of the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services that satisfy individual and organizational objectives.

**MKT 3433 RETAILING** Methods and procedures used in retail store management. Emphasis is on automation in its various forms, the role of the retail executive, the shift in store locations, and the physical distribution of merchandise. (Prerequisite: MKT 3233)

**MKT 3533 PRINCIPLES OF ADVERTISING** The study of advertising principles and practices from the business manager's perspective with an emphasis on marketing communications decision-making. The course includes an integrated approach to promotions management, budget considerations, target marketing, media alternatives and agency operations. (Prerequisite: MKT 3233)

**MKT 3633 CONSUMER BEHAVIOR** An integrative strategic marketing approach to consumer behavior which provides the student with a comprehensive framework for analyzing consumers. (Prerequisite: MKT 3233)

**MKT 3643 INTEGRATED MARKETING COMMUNICATIONS** Focuses on the management of promotional programs which include elements of advertising, personal selling, sales promotion, and public relations. Emphasis on creating, executing, and evaluating promotional programs. (Prerequisites: MKT 3233) (Previously listed as Promotional Strategies)

**MKT 4123 INTERNATIONAL MARKETING** This course provides an informed appreciation of international marketing as an academic subject and management practice. Topics covered include application of the marketing mix to an international environment, the effects of cultural, economic, governmental, and technical environments on the marketing function, challenges in international marketing research, and the organizational structure of multi-national firms. The focus is on the marketing management function in an international context. (Prerequisite: MKT 3233 and permission of instructor.)

**MKT 4243 SALES AND SALES MANAGEMENT** Focuses on interpersonal communications between buyers and sellers and the management of the sales force. Topics covered include personal sales presentations and hiring, training, motivating, supervising, and evaluating sales representatives. (Prerequisite: MKT 3233)

**MKT 4333 MARKETING RESEARCH** The role of research in the marketing management decision-making process. This project based course examines various methods of data gathering techniques along with quantitative and qualitative methods of data analysis. (Prerequisites: ECON 2633 and MKT 3233)

**MKT 4433 HOSPITALITY AND TOURISM MARKETING** This course applies marketing principles, theories and concepts to develop marketing strategies for hospitality, recreation, and tourism organizations. Learning outcomes include identifying marketing strategies for hospitality/tourism, differentiating services marketing, understanding the role of customer expectation, and demonstrating the ability to communicate both orally and in writing. Prerequisite: MKT 3233

**MKT 4443 SERVICES MARKETING** The course will provide students with the foundations of services marketing, current trends and issues. Students will be introduced to the gaps model of service quality and the framework necessary to provide the structure needed to address unique challenges in services. Finally, strategies will be introduced to address the specific gaps. (Prerequisite: MKT 3233)

**MKT 4453 MARKETING LOGISTICS AND SUPPLY CHAIN MANAGEMENT** Focuses on the design and management of supply chains through such topics as infrastructure design, supplier-customer partnerships, risk management, information flow, materials management, and distribution, financing, and data management. Integrates the concept of value chain into supply chain management. (Prerequisites: MNGT 3113 and MKT 3233)

**MKT 4533 SOCIAL MEDIA MARKETING** This course takes an in-depth look at social networks, social media platforms, and online advertising to offer students an advantage in many positions involving marketing, consulting, and brand management. Students with an interest in entrepreneurship will also find the course useful as new businesses often rely on social media marketing. (Prerequisite: MKT 3233)

**MKT 4643 MARKETING MANAGEMENT** Analysis of the appropriate management of marketing program objectives. Integrates product, promotion, pricing, and distribution concepts into marketing strategy development, implementation, and control. (Prerequisites: MKT 3233, MKT 4433)

**MKT 4653 CONTEMPORARY ISSUES IN MARKETING** Analysis of current issues and trends in the field of marketing. Topics selected for emphasis will vary as contemporary issues change. (Prerequisite: MKT 3233)

**MKT 4950 MARKETING INTERNSHIP** Supervised professional-level marketing assignment with a business firm, government agency, or non-profit organization. (Prerequisite: departmental approval)

**MKT 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor.

**MKT 4970 SPECIAL STUDIES** Individualized project selected in consultation with professor.

**MKT 4980 SEMINAR** Small group study of topic announced by department.

**MKT 4990 RESEARCH** Independent investigation designed in consultation with the professor.

**MKT 5243 MARKETING MANAGEMENT** An integrative course utilizing the comprehensive case study method to develop experiences in effective application of marketing strategies to create competitive advantages. Emphasis is on the relationship of the marketing function in a multinational context.

**MKT 5433 HOSPITALITY AND TOURISM MARKETING** This course applies advanced marketing principles, theories and concepts to develop marketing strategies for hospitality, recreation, and tourism organizations. Learning outcomes include identifying marketing strategies for hospitality/tourism, differentiating services marketing, understanding the role of customer expectation, and demonstrating the ability to communicate both orally and in writing at the graduate level.

**MKT 5533 SOCIAL MEDIA MARKETING** This course takes an in-depth look at social networks, social media platforms, and online advertising to offer students an advantage in many positions involving marketing, consulting, and brand management. Students with an interest in entrepreneurship will also find the course useful as new businesses often rely on social media marketing.

**MKT 5633 CONSUMER BEHAVIOR** An advanced, integrated analysis of internal and external influences on consumer learning, perception and brand loyalty. Theoretical foundations will be discussed as well as practical applications to develop, evaluate, and implement effective marketing strategies.

**MNGT 2123 # INTRODUCTION TO LEADERSHIP** An introduction to the nature of leadership, with a focus on the history and origins of leadership, theoretical approaches to leadership, and the essence of contemporary leadership. Application of these concepts to life experiences will be addressed.

**MNGT 3113 # MANAGEMENT AND ORGANIZATIONAL BEHAVIOR** The study of planning, leading, organizing, and controlling to effectively manage organizations in a dynamic environment. Includes a heavy emphasis on human behavior in organizations.

**MNGT 3123 # CIVIC LEADERSHIP** A study of leadership development and skills necessary for the citizen-leader. The course examines leadership in local civic organizations, school systems, and local, state, and national government. International leadership issues are also examined. (Junior standing required)

**MNGT 3133 ORGANIZATIONAL LEADERSHIP** A survey of theory and research on leadership in formal organizations. The primary focus of the course is on managerial leadership as opposed to parliamentary leadership, leadership of social movements, or informal leadership in peer groups. (Junior standing required)

**MNGT 3143 # PRINCIPLES OF MANAGEMENT** The study of planning, organizing, leading, and controlling with emphasis on the behavioral approach.

**MNGT 3153 HOSPITALITY MANAGEMENT** This course provides students with an overview of the hospitality industry. Topics covered include the growth and development of the hospitality industry, travel and tourism, hotel operations, restaurants and food service, casinos, theme parks, and event management. The focus will be on management and operational functions and responsibilities in areas such as administration, organization, communication, accounting, marketing, and human relations. (Prerequisite: MNGT 3113)

**MNGT 3243 PRODUCTION AND OPERATIONS MANAGEMENT** This course is intended to be a survey of operating practices and models in both manufacturing and service firms. It provides managers with sufficient knowledge to make informed "total business decisions" and to introduce standard terms and concepts for communications with operating personnel. In such a course, it should be recognized that breadth of subject matter, not depth of topic, will be the goal. Emphasis is on skills for operating/controlling systems and less emphasis on design. Topics that are covered are forecasting quality control; inventory and supply chain management; aggregate/capacity planning and scheduling; and project management. (Prerequisites: BUS 2633 and MNGT 3113)

**MNGT 3343 SMALL BUSINESS MANAGEMENT** Starting and managing a small business. (Prerequisite: MNGT 3113)

**MNGT 3443 SUPERVISORY MANAGEMENT** A study of the problems involved between the supervisor and the employee including union involvement. (Prerequisite: MNGT 3113)

**MNGT 3533 HUMAN RESOURCE MANAGEMENT** To acquaint the student with EEO regulations and with modern methods of selection, appraising, training, and solving various personnel problems. (Prerequisite: MNGT 3113 OR POSC 3563 for Public Administration minors)

**MNGT 3733 NATIVE AMERICAN GAMING MANAGEMENT** This course is designed to prepare students for careers in Native American gaming. It explores all facets of casino operations, from food and beverages to cage operations, auditing, marketing, and reporting. It examines the mathematics and utility analysis of gaming, including newly introduced technologies and related practices for gaming and casino operations. Students will also be introduced to the laws and politics of Indian gaming and tribal sovereignty issues. Prerequisite: MNGT 3113

**MNGT 3933 RESTAURANT OPERATIONS** Restaurant operations management will address content areas including industry basics, sanitation, safety, nutrition, marketing, menu planning, design, and pricing, human resources, accounting and financial management, product purchasing, receiving, storing and issuing, and restaurant analysis and improvement. (Prerequisite: MNGT 3113)

**MNGT 3943 HOTEL OPERATIONS** This course is designed to provide the students with a general understanding of the operations and management of today's modern hotels. Students are introduced to the history of the hotel industry, current industry trends and the various departments and managers' responsibilities that are key elements of a hotel operation. (Prerequisite: MNGT 3113)

**MNGT 4113 CONTEMPORARY ISSUES IN LEADERSHIP** A study of the fundamental cultural, ethical, and philosophical issues which are involved in leadership. This course, the capstone requirement for the leadership program, addresses these issues in the context of a required community project. Students will be challenged through these projects to become catalysts for positive change and leadership in their communities. Students will prepare presentations outlining course projects and present them before a panel of professors and community members. (Junior standing required)

**MNGT 4243 QUALITY MANAGEMENT** History, philosophy, and theory of total quality management as presented by authors such as W. Edwards Deming, Joseph Juran, Philip Crosby and others. The focus will be on continuous quality improvement, total quality control, competitive advantage, problem solving, and statistical process control. (Prerequisite: MNGT 3113)

**MNGT 4253 ORGANIZATIONAL BEHAVIOR** Perspectives on modern theories regarding human behavior in organizations. Attention focused on theories and realities of leadership, power, motivation, work-satisfaction, group dynamics, decision-making, and organizational change. (Prerequisite: MNGT 3113)

**MNGT 4353 MANAGEMENT SCIENCE** A continuation of the Production and Operations Management course (MNGT 3243) this course provides students with the proficiency to build mathematical models of complex problems and to solve them using the tools they learn in class. Topics covered will be linear programming; Monte Carlo simulation; and decision analysis. Emphasis is on problem formulation and computer-solving techniques. Most applications will be from operations, finance, and marketing. Prerequisites: MNGT 3113, BUS 2633 and MNGT 3243)

**MNGT 4443 INTERNATIONAL BUSINESS** This course reflects the sensitivity to economic, political, and cross-cultural differences of the global market in relation to planning, pricing, promotion, distribution, and the need to remain competitive. (Prerequisite: MNGT 3113 and MKT 3233)

**MNGT 4533 HOSPITALITY HUMAN RESOURCE MANAGEMENT** This course approaches hospitality human resource management as a decision making process that affects the performance, quality, and legal compliance of the hospitality business as a whole. Beginning with a foundation of the hospitality industry, employment law, and HR policies, the coverage includes recruitment, training, compensation, performance appraisal, environmental and safety concerns, ethics and social responsibility, and special issues. Prerequisite: MNGT 3113

**MNGT 4543 PURCHASING & MATERIALS MANAGEMENT** A study of purchasing and materials management activities in a business environment to include organization, source selection, negotiations, time phased ordering and receipt of material, and evaluation of vendors and manufacturing control. (Prerequisite: MNGT 3113)

**MNGT 4633 BUSINESS POLICY** A capstone course designed to integrate the functional areas of business for corporate and business level strategic decision making. This course is usually taken during the student's last semester of study. (Prerequisites: MKT 3233, FIN 3113, MNGT 3113, and permission)

**MNGT 4653 CONTEMPORARY ISSUES IN MANAGEMENT** Analysis of current events and issues in the field of management. Topics will vary as contemporary issues change. (Prerequisite: MNGT 3113)

**MNGT 4663 ENTREPREURSHIP AND NEW VENTURES** The entrepreneurial process is examined from conception of a business idea to the actual start up of the venture. Topics include environmental scanning for new opportunities, evaluating practical commercial potential, developing a business plan, and securing financing. (Prerequisite: MNGT 3113)

**MNGT 4753 BUSINESS CONSULTING** Business Consulting is a student led, faculty supervised, business consulting service for area small business owners or nonprofit organizations. Student consultants gain valuable real-world experience by utilizing management skills and knowledge to develop strategic objectives and action steps to support the growth of a small business skills in an active work environment.

**MNGT 4950 MANAGEMENT INTERNSHIP** Supervised professional-level management assignment with a business firm, government agency, or non-profit organization. (Prerequisite: departmental approval)

**MNGT 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor.

**MNGT 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor.

**MNGT 4980 SEMINAR** Small group study of topic announced by department.

**MNGT 4990 RESEARCH** Independent investigation designed in consultation with the professor.

**MNGT 5153 HUMAN RESOURCE MANAGEMENT** This course is a graduate level introduction to the theory and practice of human resource management. Students will gain an understanding of the impact of human resources on the development of organizational strategy. An emphasis will be placed on human resource decisions and practices and how they are influenced by forces internal and external to the organization, including global competition, technological change, and workforce demographics.

**MNGT 5223 BEHAVIORAL MANAGEMENT** The study of human behavior in organizations and its effect on establishing and attaining organizational goals in an effective and efficient manner.

**MNGT 5333 INTERNATIONAL BUSINESS** This course provides an in-depth examination of the cultural, economic, political, and legal environments of international business, including an overview of the risks, challenges, and opportunities of competing in the global marketplace. Topics include competitive advantage and strategies, importing and exporting, contracting with suppliers and distributors, and foreign direct investment.

**MNGT 5343 COMPETITIVE ADVANTAGE AND STRATEGY** The concepts and tools needed to create a competitive advantage in cost or differentiation are presented through value-chain analysis. A study of the techniques for analyzing industries and competitors with a focus on the development of competitive strategy and strategic decisions.

**MNGT 5443 SUPERVISORY MANAGEMENT** An advanced study of theories and practical applications in the major practices of modern supervision, including leadership, communication, motivation, performance appraisal, staffing, training and employee development.

**MNGT 5453 CONTEMPORARY ISSUES IN MANAGEMENT** This course has been designed to enable graduate students to explore selected leading-edge issues in global business and organizational environments. It provides an opportunity to relate state-of-the-art management concepts to practical

situations. The graduate student will gain a greater understanding of the applications of current management practices and techniques to contemporary business issues.

**MNGT 5533 HOSPITALITY HUMAN RESOURCE MANAGEMENT** This is an advanced course that approaches hospitality human resource management as a decision making process that affects the performance, quality, and legal compliance the hospitality business as a whole. Beginning with a foundation of the hospitality industry, employment law, and HR policies, the coverage includes recruitment, training, compensation, performance appraisal, environmental and safety concerns, ethics and social responsibility, and special issues.

**MNGT 5603 STRATEGIC MANAGEMENT** A capstone course for graduate students in the last stage of their course work toward an MBA degree. It covers the integration of the skill and functions of management to develop long range plans and to implement and manage the efforts directed toward the accomplishment of organizational objectives.

**MNGT 5773 PRINCIPLE-CENTERED LEADERSHIP AND ETHICS** This literature-based course emphasizes the individual as decision maker and focuses on ethical issues and dilemmas facing managers and leaders in organizations. The objectives of the course are to raise students' general awareness of ethical dilemmas, to place ethical issues within a management context, to enhance and improve the ability of students to reason toward a satisfactory resolution of an ethical dilemma.

**MNGT 5960 DIRECTED READINGS**

**MNGT 5970 SPECIAL STUDIES**

**MNGT 5980 SEMINAR**

**MNGT 5990 RESEARCH**

**MUS 1101 # MUSIC THEORY & LIT I AURAL LAB** Development of basic aural skills related to sight singing, rhythmic dictation, and keyboard harmony, using examples from all major stylistic periods. Concurrent with MUS 1203.

**MUS 1113 # MUSIC IN AMERICAN SOCIETY** A listening survey of popular styles in America, such as folk, jazz, rock, or country-western.

**MUS 1123 # MUSIC LITERATURE AND APPRECIATION** A listening survey of the music of Western civilization from the Romantic and 20th century periods.

**MUS 1132 BEGINNING MUSIC READING** This course is designed to provide the student with basic music reading, listening and music identification skills.

**MUS 1203 # MUSIC THEORY & LIT I, INTRO TO MUS STUDY** Study of basic concepts of musical language, forms and concepts, using examples of literature from all major stylistic periods.

**MUS 1213 # FUNDAMENTALS OF MUSIC** The rudiments of music, functional notation, and acoustic principles in historical context for beginners in music study. (Not for music majors)

**MUS 1231 # MUSIC THEORY & LIT II AURAL LAB** Aural analysis and skills including: beginning music reading, dictation, keyboard harmony and aural analysis of standard works. Continuation of MUS 1101. (Prerequisite: MUS 1101 or permission of instructor. Concurrent with MUS 1243)

**MUS 1243 # MUSIC THEORY & LIT II, ELEM WRITING & ANALYSIS** Basic compositional procedures and analytical systems; melodic study, two-part compositions and analysis of literature. (Prerequisite: MUS 1203 or permission of instructor)



**MUS 1302 INTRODUCTION TO MUSIC EDUCATION** An overview of the music education profession, emphasizing the history, philosophy, and standard practices of the public school music classroom.

**MUS 1400 RECITAL ATTENDANCE** Opportunities to hear performances of diverse literature. (Required for all music majors)

**MUS 1411 CHORAL UNION** A vocal ensemble of mixed voices that performs large scale works such as cantatas, masses and oratorios; open to both university students and members of the community. (May be repeated for credit)

**MUS 1420 UNIVERSITY CHORALE** A vocal ensemble of mixed voices that performs choral music from all style periods in regular campus and off-campus concerts and tours; open to all university students by audition. (May be repeated, and taken for 1 or 2 hours credit)

**MUS 1430 UNIVERSITY BAND** Open to all university students upon audition and acceptance by the conductor. Marching band during football season, concert band during remainder of year. (May be repeated, and taken for 1 or 2 hours credit)

**MUS 1451 MEN'S GLEE CLUB** A variety of music will be performed from the literature composed expressly for men's voices. (Open to all men, may be repeated for credit)

**MUS 1460 WOMEN'S CHORUS** A variety of music will be performed from the literature composed expressly for women's voices. (Open to all women, may be repeated for credit)

**MUS 1470 JAZZ ENSEMBLE STAGE BAND** Open to all university students. Audition and permission required. Study and performance of swing, jazz and popular music of the 20th Century. (May be repeated, and taken for one or two hours credit.)

**MUS 1510 LOWER-DIVISION SECONDARY APPLIED MUSIC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**MUS 2141 BEGINNING CLASS PIANO** Class instruction in the fundamentals of keyboard technique for beginning piano students.

**MUS 2201 # MUSIC THEORY & LIT III AURAL LAB** Continuation of MUS 1231. Aural analysis and sight reading of diatonic melodies, contrapuntal dictation in two parts and harmonic dictation using all diatonic triads. (Prerequisite: MUS 1231. Concurrent with MUS 2213)

**MUS 2213 # MUS THEORY & LIT III, INTERM WRIT & ANALYS** Continuation of MUS 1243. Two- and three-part compositions and analysis of monothematic and strophic forms, diatonic triads, seventh chords and modulation. (Prerequisite: MUS 1243)

**MUS 2231 # MUSIC THEORY & LIT IV AURAL LAB** Continuation of MUS 2201. Aural analysis; harmonic dictation of chromatic harmony; sight reading of modulation melodies. (Prerequisite: MUS 2201. Concurrent with MUS 2243)

**MUS 2243 # MUS THEORY & LIT IV, ADV WRIT & ANALYS** Continuation of MUS 2213. Four-part writing and analysis, smaller homophonic forms, chromatic harmony and advanced modulation. (Prerequisite: MUS 2213)

**MUS 2301 PIANO ACCOMPANYING** Required of all piano Bachelor of Music Performance degree students. Students will accompany a vocal ensemble and be assigned to accompany students in solo and chamber music performances.

**MUS 2341 ELEMENTARY CLASS PIANO I** First semester of piano study in the sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better. Class instruction in the development of a basic functional knowledge of the piano.

**MUS 2361 CHILD/ADOLESCENT VOICE DEVELOPMENT** Study of the physiological development of the adolescent, pubertal, and high school singing voice. Students will explore age-appropriate vocalizes designed to improve singing skills among adolescent singers.

**MUS 2401 ELEMENTARY BRASS CLASS** Brass pedagogy involved in teaching Trumpet, Horn, Trombone, Euphonium and Tuba in public schools; to acquire the ability to play simple melodies and scales. (Semiprivate)

**MUS 2411 ELEM WOODWIND CLASS** Woodwind pedagogy involved in teaching Flute, Oboe, Clarinet, and Bassoon in public schools; to acquire the ability to play simple melodies and scales. (Semiprivate)

**MUS 2421 ELEM STRING CLASS** Class instruction in the fundamentals of string technique for beginning string students. (Semiprivate)

**MUS 2431 ELEM PERCUSSION CLASS** Class instruction in the fundamentals of percussion technique for beginning percussion students. (Semiprivate)

**MUS 2441 ELEMENTARY CLASS PIANO II** Class instruction in the fundamentals of keyboard technique for beginning piano students. (Semiprivate; may be repeated for credit) Second semester of study in sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better. Continuation of MUS 2341

**MUS 2451 ELEM VOICE CLASS** Elementary instruction in basic vocal technique combined with an elementary survey of appropriate vocal literature. (Semiprivate; may be repeated for credit)

**MUS 2461 ELEM GUITAR CLASS** A recreational course for personal and general education enrichment. (Semiprivate; may be repeated for credit)

**MUS 2471 LYRIC DICTION I** A study of the international phonetic alphabet as it applies to singing. Course includes laboratory experiences in pronunciation and performance through vocal literature. (English and Italian)

**MUS 2481 LYRIC DICTION II** A study of the international phonetic alphabet as it applies to singing. Course includes laboratory experiences in pronunciation and performance through vocal literature. (German and French)(Prerequisite MUS 2471)

**MUS 2510 LOWER-DIVISION MAJOR APPLIED MUSIC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**MUS 2541 INTERMEDIATE CLASS PIANO I** Third semester of piano study in the sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better, Demonstration of ability to successfully complete any four of the seven proficiency skills. The four will be chosen from: sight-reading, harmonization, transposition, 1 hymn & 3 patriotic songs, all major/minor scales, chords and arpeggios (all two octaves), accompaniment, and open score. (Prerequisite: MUS 2441)

**MUS 2641 INTERMEDIATE CLASS PIANO II** Fourth semester of piano study in the sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better. Demonstration of ability to successfully complete the remaining two or three proficiency skills listed for MUS 2541 depending on the degree sought. (Prerequisite: MUS 2541)

**MUS 3092 GUITAR LITERATURE** A survey of classical guitar literature in a broad historical, formal and technical context.

**MUS 3102 BRASS LITERATURE** A survey of literature for the various instruments in the brass family, taken from all historical style periods.

**MUS 3113 # HISTORY OF MUSIC I** A study of the evolution of musical styles and forms from antiquity through the Baroque era.

**MUS 3123 # HISTORY OF MUSIC II** A continuation of MUS 3113. Study of styles and forms from the Classic period to the present.

**MUS 3133 # INTRODUCTION TO WORLD MUSIC** This is a survey course in which music is studied within the context of culture. This will involve studying music from a global perspective, exploring music both as a phenomenon of sound and a phenomenon of culture. Students will examine representative examples of music in the Western and non-Western world and develop a vocabulary and deeper understanding to discuss the musical and social aspects of each culture. In addition, students will learn to identify style characteristics, structural components, instruments, ensemble types, and dance forms from each culture.

**MUS 3142 PERCUSSION LITERATURE** A survey of literature for the various instruments in the percussion family, taken from all historical style periods.

**MUS 3152 PIANO LITERATURE** A survey of piano literature from all style periods.

**MUS 3162 VOCAL LITERATURE** A survey of solo vocal literature for all voice types, from all historical style periods.

**MUS 3172 WOODWIND LITERATURE** A survey of solo literature for the various instruments in the woodwind family, taken from all historical style periods.

**MUS 3182 WIND BAND LITERATURE** A survey of wind band literature suitable for various levels of instruction spanning the documented history of the medium from 1550 to the present.

**MUS 3192 CHORAL LITERATURE** One semester course designed to survey choral music literature from the perspective of historically significant works and the utilitarian perspective of appropriateness for particular types of ensembles.

**MUS 3201 # MUSIC THEORY & LIT V AURAL LAB** Continuation of MUS 2231. Aural analysis; advanced music reading problems including contemporary music. Concurrent with MUS 3213. (Prerequisite: MUS 2231)

**MUS 3213 # MUS THEORY & LIT V, CONTRP WRIT & ANALYS** Continuation of MUS 2243. Composition and analysis of contrapuntal forms (invention, fugue, choral prelude); advanced chromatic harmony. (Prerequisite: MUS 2243)

**MUS 3231 # MUSIC THEORY & LIT VI AURAL LAB** Continuation of MUS 3201. Aural analysis, advanced problems in sight singing, dictation and keyboard harmony. Concurrent with MUS 3243. (Prerequisite: MUS 3201)

**MUS 3243 # MUS TH & LIT VI CONT WRITING & ANALY** Continuation of MUS 3213. Composition and analysis in contemporary forms and systems. (Prerequisite: MUS 3213)

**MUS 3302 BRASS PEDAGOGY** A study of teaching methods appropriate for brass instruments.

**MUS 3323 MUSIC METHODS & MATERIALS FOR CLASSROOM TEACHERS** Materials and methods of teaching music at the elementary school level. (Not for music majors)

**MUS 3332 MARCHING BAND TECHNIQUES** Techniques of planning shows and drills for marching band and adjunct marching units, emphasizing perspectives and performance techniques.

**MUS 3342 PERCUSSION PEDAGOGY** A study of teaching methods appropriate for percussion instruments.

**MUS 3352 PIANO PEDAGOGY** A study of teaching methods appropriate for the piano.

**MUS 3362 VOCAL PEDAGOGY** A study of teaching methods appropriate for the various voice types.

**MUS 3372 WOODWIND PEDAGOGY** A study of teaching methods appropriate for woodwind instruments.

**MUS 3383 # MUSIC TECHNOLOGY AND INTEGRATION** This course will provide opportunities for students to investigate the various ways music technology is utilized in society. Concepts related to sound reproduction, recording hardware and software, music sequencing, and notational software will be important components for course presentations.

**MUS 3392 GUITAR PEDAGOGY** A survey of pedagogical resources and methods of the classic guitar.

**MUS 3401 INTERMEDIATE BRASS CLASS** Continuation of MUS 2401; to acquire knowledge concerning intonation problems, basic acoustics, etc., while developing a playing ability equivalent to an intermediate method book. (Prerequisite: MUS 2401 or permission of instructor. Semiprivate)

**MUS 3411 INTERMEDIATE WOODWIND CLASS** Continuation of MUS 2411; to acquire knowledge concerning intonation problems, basic acoustics, etc., while developing a playing ability equivalent to an intermediate method book. (Prerequisite: MUS 2411 or permission of instructor. Semiprivate)

**MUS 3421 INTERMEDIATE STRING CLASS** Continuation of MUS 2421. (Prerequisite: MUS 2421 or permission of instructor. Semiprivate)

**MUS 3441 ADVANCED CLASS PIANO I** Fifth semester of study in sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better. Additional study in literature, sight-reading, open score, transposition, ensemble, and harmonization skills. Continuation of MUS 2441. (Prerequisite: MUS 2641 or permission of instructor, Semiprivate; may be repeated for credit)

**MUS 3451 INTERMEDIATE VOICE CLASS** Continuation of MUS 2451. (Prerequisite: MUS 2451 or permission of instructor. Semiprivate; may be repeated for credit)

**MUS 3461 INTERMEDIATE GUITAR CLASS** Continuation of MUS 2461. (Prerequisite: MUS 2461 or permission of instructor. Semiprivate)

**MUS 3471 PRINCIPLES OF CONDUCTING** Introduction to the principles of conducting; baton techniques; beat patterns; rehearsal procedures; development of physical coordination through actual participation in class.

**MUS 3481 INSTRUMENTAL CONDUCTING** Study and application of the principles of conducting relative to instrumental ensemble literature; comparative examination of conducting and rehearsal techniques, score reading, terminology and actual ensemble conducting experience. (Prerequisite: MUS 3471)

**MUS 3491 CHORAL CONDUCTING** Study and application of the principles of conducting in relation to vocal ensemble literature with attention to choral tone, diction, score study, style and interpretation with actual ensemble conducting experience. (Prerequisite: MUS3471)

**MUS 3510 UPPER-DIVISION SECONDARY APPLIED MUSIC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**MUS 3541 ADVANCED CLASS PIANO II** Sixth semester of piano study in the sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better. Continuation of MUS 3441

**MUS 3592 ADVANCED DICTION** Advanced application of phonetics, articulation, and pronunciation of German and French languages through selected vocal and operatic literature with continued study of the international phonetic alphabet. (Prerequisite MUS 2741 and MUS2481)

**MUS 3641 ADVANCED CLASS PIANO III** Seventh semester of piano study in the sequence of piano curriculum for music majors. Music majors must pass with a grade of "C" or better. Continuation of MUS 3541.

**MUS 4202 ORCHESTRATION** Study of tonal resources and capabilities of all orchestral instruments. Opportunities are provided to score existing and original compositions in an orchestral texture. (Prerequisite: MUS 2213)

**MUS 4212 INSTRUMENTATION** Demonstration of the instruments of the band and a study of basic transpositions and ranges; transcriptions for ensembles and full band. (Prerequisite: MUS 2213)

**MUS 4220 RECITAL PERFORMANCE** Performance of degree or non-degree student recitals. All student recitals are subject to faculty hearings. Preparation for student degree recitals. Coaching, accompanying, program note preparation, and recording.

**MUS 4232 ADVANCED COMPOSITION** Advanced study of 20th-century literature; advanced analytical problems; directed opportunities to utilize traditional and contemporary compositional techniques. (Prerequisite: MUS 3243 or permission of instructor)

**MUS 4241 RECITAL PERFORMANCE FOR B.M. MAJORS** Performance of recital for candidates in the Bachelor of Music in Performance degree. Assessment of recital includes areas of performance facility (technique, intonation, tone, articulation/diction, and rhythm), musicality (phrasing, dynamics, interpretation, and performance practice), and performance preparation (stage presence, memorization, and program notes). All students recitals are subject to faculty hearings. Candidates in the Bachelor of Music Education degree may enroll in this course as an elective.

**MUS 4303 METHODS & MATERIALS IN ELEMENTARY MUSIC** Resources, materials, and techniques for the elementary school music specialist. For all music education majors. (Will not count toward a major or minor in music. Prerequisite: admission to Teacher Education)

**MUS 4313 METHODS & MATERIALS IN INSTRUMENTAL MUSIC** Resources, materials and techniques for the instrumental music specialist. For instrumental and combined music education majors only. (Will not count on a major or minor in music. Prerequisite: admission to Teacher Education)

**MUS 4323 METHODS & MATERIALS IN VOCAL MUSIC** Resources, materials and techniques for the vocal music specialist. For vocal and combined music education majors only. (Will not count toward a major or minor in music. Prerequisite: admission to Teacher Education)

**MUS 4332 COMPARATIVE PIANO METHODS & MEDIA** A critical study of available piano courses and methods. Principles of a sound pedagogical approach for individual and group study of piano.

**MUS 4401 INSTRUMENTAL ENSEMBLE** Performance and study of smaller ensemble music according to class listing, performances of student projects; discussion of styles and ideas in performance. Offerings include Brass, Woodwind, and Percussion ensembles. (Prerequisite: permission of instructor; may be repeated for credit)

**MUS 4410 VOCAL ENSEMBLE** Open to all university students by audition according to class listing. Offerings include Opera Workshop, and Chamber Singers. (May be repeated for credit)

**MUS 4440 CAPSTONE PROJECT** Major final project in the field of music, completed in consultation and with the supervision of an advising professor. (Permission required)

**MUS 4510 UPPER-DIVISION MAJOR APPLIED MUSIC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**MUS 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: permission of instructor)

**MUS 4970 SPECIAL STUDIES** Individualized project selected with the advice of the professor. (Prerequisite: permission of instructor)

**MUS 4980 SEMINAR** Small group study of topic announced by department (Prerequisite: department approval)

**MUS 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: permission of instructor)

**MUS 5001 MUSIC THEORY REVIEW** This course will cover the material of an entire undergraduate theory sequence from key signatures to pitch sets. It is expected that this material is mostly a review, and is intended to both prepare students for advanced classes in music theory required at the graduate level and complete their musical training. Topics covered include part writing, analysis, basic forms, counterpoint, and twentieth-century techniques.

**MUS 5011 MUSIC HISTORY REVIEW** This course is designed to provide the incoming graduate student a general overview of the history, literature, styles, and techniques in music in preparation for advanced study in Music History. This course will include listening, score-reading, analysis and vocabulary to assist students in communicating ideas about music.

**MUS 5182 ADVANCED INSTRUMENTAL LITERATURE** This course will provide a comprehensive survey of early, traditional, and contemporary wind band literature with a focus on performance practice analysis, and conducting techniques. Repertoire will be selected from a wide range of grade levels. Students will be able to apply knowledge garnered from this course immediately into their own classrooms. Prerequisite: admission to Master of Music Education Program Corequisite: MUS 5203 Advanced Conducting and Score Reading

**MUS 5192 ADVANCED CHORAL LITERATURE** One semester course designed to survey contemporary choral music literature from A) the perspective of historically significant works and B) the utilitarian perspective of appropriateness for particular types of ensembles. Prerequisite admission to Master of Music Education Program. Co-requisite MUS 5203 Adv Conducting and Score Reading

**MUS 5203 ADV CONDUCTING & SCORE READING** Conducting problems in both choral and instrumental literature of all periods; open choral score and instrumental score reading at the piano.

**MUS 5213 FORM AND ANALYSIS** Students in this course will study the forms and processes that define musical structure. Analysis is a vital activity for all musicians, especially those in music education. This course begins with definitions of the structural components of music composition and continues to descriptions of simple and complex forms. Learning to comprehend and analyze listening examples and scores will be the primary focus throughout the semester. Students will study assigned readings and give presentations on musical works within their particular interest.

**MUS 5233 ORCHESTRATION** This course, designed for music educators, is an intensive study of transcription, orchestration, and arranging. Students will study pieces for instructional and vocal groups. This class includes analysis, lectures, score study, listening, class presentations, and orchestration and transcription assignments. Emphasis is placed on transcribing and arranging for elementary, junior, and senior high ensembles. During the semester students will write a series of arrangements for various instrumental and choral groups and complete a final project for band or choir that will be read by a live group.

**MUS 5243 ADVANCED STUDY IN MUSIC THEORY** Advanced study includes analysis and composition using the harmony, musical form, and theories of music. Course material will be individualized based on students' interests and advice of the instructor.

**MUS 5303 ADV METHODS & MEDIA IN ELEM SCHOOL MUSIC** Advanced methods and media in elementary school music including exploration of new materials and ideas in elementary music and their presentation.

**MUS 5313 ADVANCED METHODS & MEDIA IN INSTRUMENTAL MUSIC** The organization and administration of the entire instrumental program; plans and techniques of class instruction in instruments; rehearsal routine; methods and materials.

**MUS 5323 ADV METHODS & MEDIA IN VOCAL MUSIC** A survey of solutions to problems in teaching vocal music/and an examination of current materials.

**MUS 5333 HISTORY AND PHILOSOPHY OF MUSIC EDUCATION** This course is an examination of the history of music education in the United States including internal and external influences and educators' responses to them. Students will examine their knowledge and beliefs about music education to create a researched and reasoned basis for their current practices.

**MUS 5343 MUSIC EDUCATION RESEARCH** This course will provide opportunities for students to explore, and develop, a basic understanding of the various types of research utilized in music education. Students will focus also on establishing a fundamental knowledge of basic research terminology with regard to statistical analyses. In addition to research terminology, students will gain an introductory knowledge of the 5 basic components of a research project, which include 1) Introduction, 2) Review of Literature, 3) Purposes and Methodology, 4) Data and Analysis 5) Discussion and Conclusions.

**MUS 5353 MUSIC EDUCATION CURRICULUM DEVELOPMENT&ASSESSMENT** This course is an examination of public school music curricula including practical applications of local, state, and national standards and assessments for evaluation of student achievement.

**MUS 5363 MUSIC ADMINISTRATION AND SUPERVISION** This course is a detailed study of the management of a music education program including legal, practical, and supervisory activities. Practical application of these topics will include creating and piloting strategies for administering and supervising school music education programs.

**MUS 5510 GRADUATE APPLIED MUSIC** Graduate applied music. (Field of study is course title)

**MUS 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the professor.

**MUS 5970 SPECIAL STUDIES** Individualized project selected with the advice of the professor.

**MUS 5980 SEMINAR** Small group study of topic announced by department.

**MUS 5990 RESEARCH FOR MASTER'S THESIS** Independent investigation designed in consultation with the professor.

**NAL 5002 INTRODUCTION TO NATIVE AMERICAN LEADERSHIP** This course will provide an orientation to the Native American Leadership Master of Science (NALMS) degree program. A brief description of each required course will be provided with a plan of action for the student to complete the degree program in a timely manner based on one fiscal year (12 months) with various options. Additionally, master level skills, such as academic integrity, time management, effective use of the SE Library, comprehending complex scholarly texts and research articles, and use of APA form and style in professional communication are also introduced. Students will complete the course with a better understanding of

personal goals, strengths, and challenges, and a roadmap to navigate their way to completion of their educational aspirations.

**NAL 5013 CURRENT TOPICS IN INDIAN COUNTRY** The course will examine issues that directly impact the daily operations of tribal governments and the tribal members of those governments. The course will highlight areas from a broad range of topics with the understanding that these topics of interest are constantly changing and developing. Areas such as economic development, health and education, social services, culture and language, and tribal governance will be studied so to provide the students with a broad range of knowledge as the topics relate to them or their communities.

**NAL 5113 PERSONAL & ORGANIZATIONAL LEADERSHIP STYLES** This course examines different types of leadership styles and provides an introduction to the different frames in which leaders can view behaviors and responses within an organizational context. The course will pay special attention to a student's individual assessment of their personal leadership style, the role of self-care in leading, and gender-differences in leadership. The structural, political, human resources, and symbolic frames and the impact those frames have on organizations will be examined. The course will also compare and contrast Native American leadership styles with styles more closely associated with western culture.

**NAL 5123 MANAGING DIVERSITY -NATIVE AMERICAN WORKPLACE** This course covers issues involved in multi-cultural organization for valuing diversity, relationship building, communicating across cultures, and managing people of different genders, races, and cultures with an emphasis on diversity as it pertains to Native American people in the workforce. Issues of stereotype, bias and resistance are examined from both a personal and an organizational perspective with an emphasis on making meaningful contributions to diversity initiatives within organizations.

**NAL 5133 EFFECTIVE COMMUNICATION THROUGH PRESENTATIONS** Leaders not only need a vision, but a way to effectively communicate that vision. This course will prepare the student for a variety of leadership roles by exploring contemporary concepts about the meanings and functions of communication and presentations in organizations. Communication styles of Native American peoples will be examined to better understand the characteristics that may include eye contact, assertiveness, and body language. Students will analyze key aspects of knowing the audience, developing persuasive content, effectively using media, understanding delivery techniques, and the use of story in presentations. Students will contend with these concepts from a personal standpoint by using examples from their own experiences to apply best practices and improve their own communication and leadership skills.

**NAL 5143 CRITICAL THINKING AND PROBLEM SOLVING** This course examines the mental activities needed to effectively formulate or solve problems, make decisions, or understand and conceptualize issues. Concepts such as free-will, determinism, truth, knowing, and moral judgements will be explored and applied to the modern leader. Barriers to effective problem solving will be reviewed and along with strategies for improvement. Special attention will be paid to the role of creativity in the problem-solving process and the role of Native culture in viewing problems.

**NAL 5153 DEVELOPING THE NATIVE AMERICAN LEADER** This course examines the development of leadership within individuals and explores the influence of leaders regardless of position. The course will pay special attention to the role of mid-level managers in tribal organizations and their ability to work both up and down, as well as across organizational tribal structures. The challenges of balancing the needs of supervisors, subordinates, colleagues, and citizens will be addressed along with the case studies exploring how leaders successfully handled challenges and crisis.

**NAL 5213 NATIVE AMERICAN EDUCATION POLICY** This course is a survey of historical and contemporary developments regarding Native American education policy. Conflicting values at the personal, tribal, state, and federal level will be explored along with the results of such governmental policies. The course will give careful examination to the Meriam Report, Indian Education Act of 1972, Johnson O'Malley Act of 1934, No Child Left Behind, Ester Martinez Native American Languages Preservation Act



of 2006, and current policy as it is developed. The course will begin with a historical perspective on Indian Education prior to the arrival of Spanish and other European influences.

**NAL 5223 GEOGRAPHY AND TREATIES** This course examines North American historical geography with an emphasis on the historical relationships of American Indians to place and indigenous mapping techniques, thereby allowing one to better contextualize "contemporary" issues. Generally, the course focuses on place and territorial identity in the historical and contemporary life of North American Indians and as a result, provides insight regarding other indigenous (Native) peoples around the world. The course may include, but not emphasize, Native American themes that are not related to place. The course has four ongoing components: (1) North American Historical Geography, (2) Native Peoples' "Geographies of the Homeland," (3) Historical Cartography of North American, and (4) Native American Treaties

**NAL 5233 TRIBAL SOVEREIGNTY** This course presents an overview of major legal principles of federal Indian law, major developments in federal Indian policy, and how they have affected the education of American Indians and Alaska Natives. Three fundamental legal principles of federal Indian law are presented: (1) tribes are independent sovereign governments, separate from the states and the federal government, (2) tribal sovereignty generally extends over a federally recognized geographic territory and over the activities and conduct of tribal and nontribal members within that territory, and (3) tribal sovereignty is inherent and exists unless and until Congress takes it away. Court cases illustrating these principles will be discussed. Since questions about tribal sovereignty are often viewed as questions of the intent of Congress, acts of Congress concerning treaties, statutes, and public laws are

**NAL 5243 ETHNOHISTORY OF NATIVE PEOPLES** Ethnohistory is the study of ethnographic cultures and indigenous customs by examining historical records. It is also the study of the history of various ethnic groups that may or may not exist today. Ethnohistory of Native Peoples uses both historical and ethnographic data as its foundation. Its historical methods and materials go beyond the standard use of documents and manuscripts. Practitioners recognize the utility of such source materials as maps, music, paintings, photography, folklore, oral tradition, site exploration, archaeological materials, museum collections, enduring customs, language, and place names.

**NAL 5970 SPECIAL STUDIES** Individualized project selected in consultation with professor.

**NS 1113 # INTRODUCTION TO NATIVE STUDIES** This course surveys the importance of Native Studies. The focus of this class is inter-disciplinary in nature and will connect four main areas of scholastic attention: Art and Literature, Education and Language, Cultural Studies and Environment, and Leadership and Self-Determination.

**NS 1213 # CHICKASAW CULTURE AND LANGUAGE** This class explores Chickasaw culture, history, art, governance, language, and philosophy. Basic Chickasaw language instruction is also a significant component of this class.

**NS 2113 NATIVE HEALTH AND WELLNESS** This course will survey the historical and contemporary policy of Native people and their health. This emphasis includes: behavioral, physical, psychological, and spiritual health. This course will also discuss traditional medicine and healing, research needs related to Native health, and career opportunities in health professions.

**NS 3113 # NATIVE POLICY AND LAW** Students will learn how federal Native policies from colonial times to the present were initiated and received. An thorough examination of essential documents, treaties, case law, and agencies will take place in this class.

**NS 3213 # NATIVE RELIGION AND PHILOSOPHY** This course is a survey of understanding and explaining the relationships between human beings and the natural world in Native cultures. Topics addressed in this class: hegemony, religion, ceremonial observances, ethics, and culturally based ways of knowing. Attention will also be given to current and future issues of religion and philosophy.

**NS 3313 # NATIVE EDUCATIONAL POLICY** A survey of historical and contemporary developments regarding Native education and conflicting values at a tribal, state, and federal level will be explored along with the results of such policies.

**NS 4970 SPECIAL STUDIES** Individualized or group projects selected in consultation with the professor. (Prerequisite: consent of instructor)

**OBOE 1510 OBOE LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**OBOE 2510 OBOE LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**OBOE 3510 OBOE UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**OBOE 4510 OBOE UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**ORGL 3113 FOUNDATIONS OF ORGAN LEADSHP&PERSONAL DEVELOPMENT** This course is an introduction to the Organizational Leadership Bachelor of Science Program. Essential components will include: overview of program expectations; principles of adult learning; resources for success including library, campus, online resources and mentoring relationships; personal wellness/stress and time management techniques; study and test-taking skills; and basic computer skills for working in an online environment

**ORGL 3223 PROFESSIONAL COMMUNICATION** A study of communication in the workplace within a framework of organizational ethics. Essential components and course content include: listening, verbal and nonverbal communication, written expression, and professional presentation methods.

**ORGL 3333 DATA ANALYSIS AND INTERPRETATION** This course will enable the student to develop an understanding of the application and interpretation of basic data analysis. Essential components and course content will include basic data analysis from a user perspective. Hands-on exercises will enable students to utilize Excel to solve problems and interpret results.

**ORGL 3443 SURVEY OF FISCAL MANAGEMENT** A managerial overview of fiscal management within organizations. Essential components and coursework content will include: understanding the components and articulation of financial statements, knowledge and application of financial ratios leading to an understanding of organizational performance across time and in comparison to industry standards, utilization of financial information in the acquisition of capital and budgeting decisions, and rudimentary understanding of cash flows.

**ORGL 4113 ETHICS AND ORGANIZATIONS** This course is designed to examine the dynamics of workplace and personal ethics through the study of basic philosophical theories. Essential components and course content will include: leadership in the context of self-governance, responsibility, adherence to principles, integrity and constancy of purpose. Current case studies will be used to apply ethical theories.

**ORGL 4223 THE INDIVIDUAL, THE ORGANIZATION AND SOCIETY** An examination of contemporary issues that affect organizations. Essential topics include environmental stewardship, social responsibility of the organization, effects and implications of globalization, the status of individual freedom within the organization, diversity, and the ramifications of technological change. This seminar course will be organized around student discussion and topical papers.

**ORGL 4333 LEADING AND MANAGING** This course is a study of theories that influence leadership and management with application to a variety of work situations. Essential components and coursework content will include: basic leadership and behavior styles, negotiation, critical thinking, change, conflict

resolution, ethics and social responsibility and diversity in the workplace. Assessment of personal leadership abilities and personality traits will be included.

**ORGL 4443 MARKETS AND STAKEHOLDERS** This course introduces the student to the concept of markets and stakeholders. Essential components and course content will include: an overview of competitive markets, buyer behavior, development of new markets and products, marketing communication, distribution channels, pricing and marketing mix strategies. It will include a discussion of external environmental factors and stakeholder analysis. Students will be able to evaluate market needs, select target markets and develop an appropriate market mix.

**ORGL 4553 CAPSTONE** This course provides the student the opportunity to integrate concepts and theories covered in the core with their area of focus. Students will design and implement a capstone project related to their area of focus culminating in a written and oral presentation. This course must be taken in the student's final enrollment period.

**ORGL 4993 INTERNSHIP IN ORGANIZATIONAL LEADERSHIP** Supervised professional-level assignment with an organization, firm government agency, or not-for-profit entity within the selected area of focus. Prerequisites: All courses except for ORGL 4553 Capstone. Permission of instructor

**ORIE 1002 # COLLEGE SUCCESS** An overview of academic skills and personal life management concepts that promote success in college.

#### **ORIE 1012 STUDY SKILLS**

**ORIE 1021 # INFORMATION LITERACY** This course is designed to educate students on how to properly organize, decipher, and evaluate information and use the tools necessary to do so. This course will unite academia and technology to help fulfill Southeastern's mission to foster the ideal of lifelong learning.

**PERC 1510 PERCUSSION LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**PERC 2510 PERCUSSION LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**PERC 3510 PERCUSSION UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**PERC 4510 PERCUSSION UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**PHIL 2113 # INTRODUCTION TO PHILOSOPHY** A study of philosophical thought as an approach to daily living and survey of major value systems.

**PHIL 2213 # LOGIC** A study of the basic principles of logical thought and its application to daily living.

**PHIL 2223 # ETHICS** An analysis of the chief ethical theories and their relevance to actual behavior of human beings in contemporary society.

**PHIL 4980 # SEMINAR** In-depth study of specific topics in World philosophies. Topics announced by department. (May be repeated)

**PHIL 5980 SEMINAR** In-depth study of specific topics in World philosophies. Topics announced by department. (May be repeated)

**PHYS 1114 # GENERAL PHYSICS I** An algebra-based course. Fundamental principles of mechanics, heat and sound; with laboratory. (Prerequisites: MATH 1513 or ACT Math 21 or higher)(Corequisite: MATH 1613)

**PHYS 1214 # GENERAL PHYSICS II** Fundamental principles of electricity, magnetism, optics, and modern physics; with laboratory. (Prerequisite: PHYS 1114 with grade of "C" or higher)

**PNO 1510 PIANO LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**PNO 2510 PIANO LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**PNO 3510 PIANO UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**PNO 4510 PIANO UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**POSC 1513 # UNITED STATES FEDERAL GOVERNMENT** A survey of the structures and functions of the United States federal government and the political process.

**POSC 2513 # INTRODUCTION TO POLITICAL SCIENCE** This course introduces students to political science by presenting the principal approaches, concerns, methods, and conclusions of the discipline.

**POSC 3353 # POLITICAL PARTIES AND POLITICS** An analysis of United States political parties and their relationships to the electorate and the institutions of government.

**POSC 3503 # UNITED STATES JUDICIAL PROCESS** An analysis of the United States judiciary and legal process from a political perspective. Special attention will be given to such topics as the functions of the police and powers of the legal profession, and the contribution of judges and juries to the administration of justice.

**POSC 3513 # UNITED STATES CONSTITUTIONAL LAW** An analysis of principal doctrines and cases in the development of constitutional law.

**POSC 3523 # LOCAL GOVERNMENT AND POLITICS** An analysis of the governmental and political systems of local communities with emphasis upon their problems and policymaking processes.

**POSC 3533 # STATE GOVERNMENT AND POLITICS** An analysis of state political systems, focusing upon their structures, functions and policy outputs.

**POSC 3543 # DEVELOPMENT OF POLITICAL PHILOSOPHY** A study of the development of political philosophy from Plato through Rousseau.

**POSC 3563 # INTRODUCTION TO PUBLIC ADMINISTRATION** An analysis of the principles and processes of public administration.

**POSC 3573 # THE LEGISLATIVE PROCESS** An analysis of the powers, roles and decision-making processes of legislatures with special attention on the Congress.

**POSC 3583 # UNITED STATES PRESIDENCY** An analysis of the powers, roles, decision-making processes, and institutional development of the United States Presidency.

**POSC 3723 # GLOBAL POLITICS** An analysis of the fundamentals of global politics, law and organization.

**POSC 4503 # UNITED STATES FOREIGN POLICY** An analysis of the major problems, concepts, instruments and conduct of United States foreign policy since WWII.

**POSC 4533 # ASPECTS OF OKLAHOMA GOVERNMENT AND POLITICS** A general survey and study of Oklahoma state politics as operative in the American federal system.

**POSC 4543 # ELECTORAL BEHAVIOR** An analysis of the United States electoral process as influenced by political socialization and group and partisan attachments.

**POSC 4553 # UNITED STATES POLITICAL IDEAS** A study of the major political philosophies and ideas important in the development of the United States political system.

**POSC 4563 # PUBLIC POLICY** An analysis of the decision-making processes by which public policies are reached for important national issues.

**POSC 4743 # GOVERNMENT & POLITICS IN WESTERN EUROPE** An analysis of the major political and governmental systems of Western Europe.

**POSC 4753 # GOVERNMENT & POLITICS IN ASIA** An analysis of the major political and governmental systems in Asia.

**POSC 4763 # GOVERNMENT & POLITICS IN LATIN AMERICA** An analysis of the major political and governmental systems in Latin America.

**POSC 4773 # GOV'T & POLITICS IN TRANSITIONAL POST-COMM SOCIETY** An analysis of the major political and governmental systems of current and post-communist states.

**POSC 4783 # MODERN POLITICAL IDEOLOGY** A study of major political ideologies such as Liberalism, Communism, and Fascism.

**POSC 4793 # PROBLEMS IN GLOBAL POLITICS** An analysis of selected topics in global politics such as: the role and interplay of nation-states, intergovernmental organizations, and nongovernmental political organizations.

**POSC 4960 DIRECTED READING** Supervised reading and study in areas selected in consultation with the directing professor.

**POSC 4970 SPECIAL STUDIES** A special study of selected topics under a directing professor.

**POSC 4980 SEMINAR** A research or reading seminar on topic announced by department.

**POSC 4990 RESEARCH** Directed research into advanced topics.

**POSC 5960 DIRECTED READING** Supervised reading in an area selected in consultation with the directing professor.

**POSC 5970 SPECIAL STUDIES** Supervised research or project selected with advice of professor.

**POSC 5990 RESEARCH** Directed research into advanced topics.

**PSCI 1114 # GENERAL PHYSICAL SCIENCE** Introduction to physical science including physics, chemistry, geology, and meteorology; with laboratory.

**PSCI 1214 # EARTH SCIENCE** An introduction to geology, hydrology, meteorology, and astronomy; with emphasis on relevance to human society; with laboratory.

**PSCI 1414 # GENERAL ASTRONOMY** An introductory astronomy including early history, fundamentals of light and gravity, earth and the solar system, star formation and death, galaxies and the cosmos. This course involves simple algebra to explain the methods and physical concepts which are used

to provide an understanding of the modern view of the universe. Lab/observations included. (Prerequisite or corequisite: ACT Math of 19 or higher or MATH 1513 or MATH 1543)

**PSCI 5503 FOUNDATIONS OF THE STEM CLASSROOM** Methods of inquiry and problem solving; impact of science and technology on civilizations, creativity, innovation, and future trends. (Previously listed as Theoretical Foundations of Science and Tech)

**PSY 1113 # INTRODUCTION TO PSYCHOLOGY** A survey of the subfields of psychology including physiological, perception, motivation, learning, personality, abnormal and social, to enable the student to recognize bases for behavior and to develop an understanding of human behavior and experience.

**PSY 2113 # PSYCHOLOGY OF ADJUSTMENT** A study of adjustment problems and their effect on the lives, behavior, and personalities of individuals.

**PSY 2243 # INTRODUCTION TO HUMAN DEVELOPMENT** A systematic study of human development over the lifespan, with an emphasis on physical, cognitive, and psychosocial development. (Prerequisite: PSY 1113)

**PSY 3033 INTRODUCTION TO RESEARCH AND WRITING IN PSYCHOLOGY** This course is a broad-based introduction to the methods used in behavioral research, including how to search the literature of the discipline of psychology, reading and writing research papers, and using American Psychological Association (APA) writing style. (Prerequisite: PSY 1113) (Previously listed as PSY 2333)

**PSY 3123 # CHILD & ADOLESC DEVELOPMENT FOR EDUCATION MAJORS** This course focuses on the study of the physical, emotional, cognitive, and social aspects of children's and adolescents' development from the prenatal period through adolescence with the emphasis on the development of personality, learning capabilities, and interactive effects of heredity, environment, and maturation.

**PSY 3213 # PSYCHOLOGY OF CHILDHOOD** A study of the physical, emotional, cognitive and social aspects of a child's development from the prenatal period to adolescence; with emphasis on development of personality, learning capacities, and interaction of heredity, environment, and maturation. (Prerequisite: PSY 1113)

**PSY 3233 # PSYCHOLOGY OF ADOLESCENCE** The psychological development of the adolescent in relationship to self, family, peer group, school, and society. (Prerequisite: PSY 1113)

**PSY 3243 # PSYCHOLOGY OF AGING** A review of research, assessment, and treatment methods pertaining to cognitive, social and health conditions that focus on the needs of aging adults. Topics include adjustment, anxiety disorders, capacity limitations, caregiving, dementia, depression, end of life care, health promotion, substance abuse, elder abuse, and suicide. (Prerequisite: PSY 1113)

**PSY 3313 STATISTICS IN BEHAVIORAL SCIENCES** Calculating statistics and interpreting the results in solving problems in psychology. (Prerequisite: PSY 1113 and 2333) (Previously listed as Psychological Statistics)

**PSY 3353 # PSYCHOLOGY OF LEARNING** A survey of basic theories and concepts related to the learning process. (Prerequisite: PSY 1113)

**PSY 3363 # COGNITIVE PSYCHOLOGY** This course is intended to introduce the college student to the tenets of cognitive psychology including, but not necessarily limited to a history of cognitive psychology, models of cognitive psychology, an examination of the basic principles and theories pertinent to the study of cognition including an exploration of perception, attention, memory, linguistics, neurocognition, thinking and intelligence, and information processing. (Prerequisite: PSY 1113)

**PSY 3373 # PSYCHOLOGY OF PERSONALITY** A comprehensive survey of contemporary and classical theories of personality, personality development, and concepts used in understanding personality. (Prerequisite: PSY 1113)

**PSY 3393 # SOCIAL PSYCHOLOGY** An analysis of social influences on behavior, the nature of attitudes and values, social interaction, group dynamics, conformity, and leadership. (Prerequisite: PSY 1113)

**PSY 3413 # PSYCHOLOGY OF HUMAN SEXUALITY** An examination of the biological and psychological determinants of human sexual behavior. The course focuses on sexual development and sex education. Current research findings serve as a basis for study. Major consideration is given to the biological bases of sexuality, sexual attitudes and behaviors, sexual diversity, sexual dysfunctions, and becoming comfortable with one's own sexuality. (Prerequisite: PSY 1113)

**PSY 3433 # RESEARCH METHODS IN PSYCHOLOGY** A survey of research methods used in the study of psychology, with student preparation in planning and research study of a selected topic. (Prerequisites: PSY 1113, 2333, and 3313)

**PSY 3493 # PSYCHOLOGY OF WOMEN** This course will explain how individual differences in biological and environmental factors affect perceptions, cognitions and behaviors. The course will cover the effect of social, economic, political, and cultural forces on behavior. Current research findings serve as the basis for the class. Special attention is given to topics as they pertain specifically to women, including fulfilling multiple roles, pregnancy and childbirth, career choices, etc.

**PSY 3513 # HEALTH PSYCHOLOGY** Health and human behavior are closely related. This course reviews the numerous studies linking human behaviors and psychological variables to health status. Health and illness can be influenced by exercise, diet, stress, social relationships, coping behaviors, and psychological variables such as hardiness. In addition to behavior influencing health, health can also influence behavior. Health status may influence whether you go jogging, stay in bed, or even choose a particular career. In short, this course will examine the science that connects behavior to health and health to behavior. (Prerequisite: PSY 1113; in addition, six (6) hours of psychology are recommended)

**PSY 3523 # MULTICULTURAL PSYCHOLOGY** This course is a broad-based introduction to the unique value systems and behaviors common among individuals from diverse ethnic and sociocultural backgrounds which often impact personal adjustment and well-being. The course places strong emphasis on historical contexts and sociopolitical processes impacting perceptions and behaviors of individuals. (Prerequisite: PSY 1113)

**PSY 3613 # POSITIVE PSYCHOLOGY** This course will be an overview of positive psychology. It is designed to explore the concepts and research foundations of positive psychology. In addition, a primary focus will be to explore techniques and exercises used to enhance well-being and apply them to yourself. (Prerequisite: PSY 1113)

**PSY 3833 # PSYCHOLOGY OF RELIGION** Examination of theory and research on the psychological and social psychological understanding of religious belief and behavior. Topics include conversion, intrinsic and extrinsic religious orientation, religion and social behavior, theories of religion, special groups and phenomena, religion and mental health, religious development, religious experience, and spirituality. (Prerequisite: PSY 1113)

**PSY 4313 # ABNORMAL PSYCHOLOGY** A study of the dynamics, etiology, prevention and treatment of abnormal behavior, including the anxiety and psychosomatic disorders, depressive disorders, social and interpersonal disorders, psychoses, substance abuse disorders, and other abnormal personality patterns. (Prerequisites: PSY 1113 and three additional upper division hours of psychology.)

**PSY 4323 INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY** The study of human behavior as it occurs in business and industrial settings, including the psychological effect of management decisions. (Prerequisite: PSY 1113)

**PSY 4353 PSYCHOLOGICAL TESTING** An introduction to standardized psychological tests in various applied areas, administration, scoring and interpretation of established tests and study of ethical standards applied to the development and administration of tests. (Prerequisites: PSY 1113 and 3313)

**PSY 4373 # PHYSIOLOGICAL PSYCHOLOGY** An introduction to the structure and functions of the nervous and endocrine systems and their effect and control upon behavior. (Prerequisite: PSY 1113. BIOL 1114 or equivalent recommended.)

**PSY 4393 # HISTORY AND SYSTEMS OF PSYCHOLOGY** A survey of historical periods and influential theories and concepts related to contemporary psychology with emphasis upon the evolution of scientific method. (Prerequisite: 15 hours of Psychology or departmental approval)

**PSY 4443 INTERVIEWING SKILLS** An introduction to the philosophy and core processes of the helping interview. (Prerequisites: permission required; senior standing)

**PSY 4453 ADVANCED RESEARCH METHODS** This course requires the development of a research proposal involving the investigation of psychological phenomena, which will be carried out the following semester, while enrolled in PSY 4553. (Prerequisite: PSY 3433)

**PSY 4513 BEHAV MNGT & GUID FOR CHILDREN W/EXCEPTIONALITIES** Development of competency applied behavioral analysis procedures and methods for parent counseling regarding exceptional children.

**PSY 4543 FIELD EXPERIENCE IN PSYCHOLOGY** Practical applications of psychology under professional supervision in a field setting. (Prerequisite: Senior standing; PSY 4443 and 4980)

**PSY 4553 ADVANCED RESEARCH PROJECT** This course follows the successful completion of PSY 4453 and involves conducting the research proposed in the previous course. Thus, this course requires the collection of data, write-up of findings, and submission of completed manuscript for presentation or publication, while under the guidance of a faculty member (Prerequisite: PSY 4453)

**PSY 4960 DIRECTED READING** Individualized literature study in some area of psychology selected in consultation with the professor. (Prerequisite: departmental approval)

**PSY 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: Departmental Approval)

**PSY 4980 SEMINAR** Small group study of topic announced by department (Prerequisite: permission required)

**PSY 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: departmental approval)

**READ 0123 DEVELOPMENTAL READING** Instruction in understanding implicit and explicit details, drawing appropriate inferences from the written message and making reasoned qualitative judgments from passages. Covers a variety of topics and disciplines. (Req. of students who lack high school credits in history; does not fulfill general education requirements.)

**REL 1001 # VARYING SUBJECT MATTER** Varying subject matter announced by department

**REL 1102 THE LIFE OF CHRIST** A study of the life and teachings of Jesus as recorded in the four Gospels with application to his teachings to practical life.



**REL 4970 SPECIAL STUDIES** Individualized project selected with advice of professor.

**SAX 1510 SAXOPHONE LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**SAX 2510 SAXOPHONE LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**SAX 3510 SAXOPHONE UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**SAX 4510 SAXOPHONE UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**SCIE 0124 CONCEPTS IN SCIENCE** Secondary level concepts in Physics, Chemistry, and the Biological Sciences, with laboratory. (Prerequisite: department approval)

**SCIE 3123 SCIENCE IN THE ELEMENTARY SCHOOL** Methods and materials in presentation of elementary science. (Prerequisites: BIOL 1114 and PSCI 1114)

**SCIE 3224 EARTH, SPACE, & ENVIRONMENTAL SCIENCE FOR ELEM MAJ** An introduction to geology, astronomy, meteorology, and environmental science with laboratory for elementary majors. This course will also discuss the influence human activities have on the environment. This course cannot count toward any major or minor in the departments of biological or physical sciences. (Prerequisites: BIOL 1114 and PSCI 1114)

**SCIE 4243 FIELD GEOLOGY** Geological field sites in southern Oklahoma will be visited for observation and collection of rock, mineral, and fossil samples. (Prerequisite: PSCI 1214)

**SCIE 4903 METHODS AND MEDIA IN SCIENCE** Survey of curriculum content and teaching materials and methods for mid-level and secondary science instruction. (Will not count toward a major or minor in Biology, Chemistry, and Physics.) (Prerequisite: departmental approval)

**SCIE 4951 # SCIENTIFIC THOUGHT** The history and philosophy of science presented from the structure of paradigm shifts and scientific revolutions. (Prerequisites: Junior status in the Honors Program OR permission of the program)

**SCIE 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: department approval)

**SCIE 4970 SPECIAL STUDIES** Individualized project selected with the advice of the professor. (Prerequisite: department approval)

**SCIE 4980 SEMINAR** Small group study of topic announced by department (Prerequisite: department approval)

**SCIE 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: department approval)

**SCIE 5403 THE PHYSICAL SCIENCE CLASSROOM** The goal of this course is to help educators acquire pedagogical content knowledge and skills that are necessary to teach physical science for understanding, appreciation and interest by all students. The course includes analysis of secondary physical science curriculum, planning of physical science units and lessons, examination of inquiry models to teach physical science concepts, and development of standard-based assessment (Prerequisite: 8 hours of physical science with labs) (Previously listed as Science in the Secondary School)

**SCIE 5903 THE EARTH, SPACE SCIENCE CLASSROOM** The goal of this course is to help educators acquire pedagogical content knowledge and skills that are necessary to earth, space science for understanding, appreciation and interest by all students. The course includes analysis of secondary earth, space science curriculum, planning of earth, space science units and lessons, examination of inquiry models to teach earth, space science concepts, and development of standards-based assessment. (Recommended: 6 hours of earth, space sciences e.g. astronomy, geology, environmental science, etc.) (Previously listed as Science in the Elementary School)

**SCIE 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the professor. (Prerequisite: department approval)

**SCIE 5970 SPECIAL STUDIES** Individualized project selected with the advice of the professor. (Prerequisite: department approval)

**SCIE 5980 SEMINAR** Small group study of topic announced by department (Prerequisite: department approval)

**SCIE 5990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: department approval.)

**SFTY 1313 INTRODUCTION TO OCCUPATIONAL SAFETY & HEALTH** Overview of occupational safety and health in business and industry. Includes Program Organization, Hazard Information, and Program Implementation.

**SFTY 2003 INTRODUCTION TO FIRE SCIENCE** Principles of fire protection and fire prevention as they apply to business and industry.

**SFTY 2253 OUTDOOR SAFETY** An in-depth study of gun safety, hunter safety, archery safety and other outdoor hazards.

**SFTY 3103 GENERAL SAFETY** Provides students with information related to numerous safety disciplines and how to relate this information to living safely in today's complex society. The curriculum is designed to familiarize the student with general knowledge about school, traffic, community, personal, environmental, and occupational safety.

**SFTY 3113 DRIVER & TRAFFIC SAFETY EDUCATION I** An introductory course to prepare teachers of Driver Education in the secondary school.

**SFTY 3133 # DRUGS IN SOCIETY** A study of drugs and their effects. This course examines physiological, psychological, and societal effects of drug misuse and abuse in our society. In addition, the historical development of behavior altering substances from the early Chinese to the modern drug culture is studied.

**SFTY 3173 ACOUSTICS, VIBRATIONS, & NOISE CONTROL** Fundamentals of sound, vibration, and acoustics. Physical and psychological effects of noise on individuals; measurement and analysis of noise. Control of noise through the application of engineering principles and acoustics. Personal equipment for protection against noise; legal and medical aspects of noise control; effective noise control management. (Prerequisites: SFTY 1313 and 2003)

**SFTY 3553 CONSTRUCTION SAFETY** Fundamentals of safety on construction sites (commercial and industrial) will be discussed. Practical application on a simulated construction site will be included. (Prerequisites: SFTY 1313 and 2003)

**SFTY 3653 EMERGENCY MANAGEMENT** The course will provide an introduction to the field of emergency management. Additionally, this course will include discussions on the disciplines of emergency management which includes mitigation, response, recovery, preparedness, and communications. Finally,

this course will include discussions on the current and future of the emergency management professions in the wake of 9/11, and the war on terrorism.

**SFTY 3663 OIL AND GAS SAFETY AND PRODUCTION** An entry-level analysis of the safety aspects of oil and gas exploration, on and off shore drilling (to include fracking), refinement, and distribution of oil and gas products. Prerequisites: SFTY 1313 and SFTY 2003

**SFTY 4003 SYSTEMS APPROACH TO HAZARD CONTROL** Concept and methods of systems safety. Included are: failure mode and effect, management oversight risk tree (MORT), and cost-benefit analysis, statistical probability, and process safety. (Prerequisite: SFTY 1313 and 2003)

**SFTY 4113 SAFETY TRAINING AND INSTRUCTIONAL TECHNIQUES** This course covers basic safety and health training concepts, instructional methods and program development with emphasis on the adult learner. (Prerequisite: SFTY 1313 and 2003)

**SFTY 4123 DRIVER & TRAFFIC SAFETY EDUC II** Advanced course to prepare teachers of Driver Education. (Prerequisite: SFTY 3113)

**SFTY 4143 SAFETY PROGRAM MANAGEMENT** This course addresses safety program organization, administration and management. (Prerequisite: SFTY 1313 and 2003)

**SFTY 4163 FUNDAMENTALS SFTY ENGINEER&HUMAN FACTORS/ERGONOMIC** An overview of current engineering principles including facility and work status, material handling, work place exposures and protection, and production operations. Emphasis on human and ergonomic factors. (Prerequisites: SFTY 1313 and 2003)

**SFTY 4173 LEGAL LIABILITY IN SAFETY & HEALTH LEGISLATION** This course addresses safety and health legal liability, regulatory compliance, and workers compensation. (Prerequisites SFTY 1313 and 2003)

**SFTY 4183 HAZARDOUS MATERIALS & WASTE MANAGEMENT** A study of hazardous materials and waste management to include legislation, handling, storage, transportation and emergency response. (Prerequisites: SFTY 1313 and 2003)

**SFTY 4243 MOTOR VEHICLE LAW** The study of traffic laws with application to Oklahoma Law Enforcement and Safety Professionals.

**SFTY 4253 APPLIC OF OCCUP SFTY & HLTH TO INDUSTRIAL SETTINGS** This course will serve as a practicum for those students who do not get internships. Introduces students to various functions of the occupational health and safety professional in the workplace and will enable them to apply knowledge from the classroom to field conditions. This course will combine class room lectures with site visits to further develop student understanding of the application of safety to industrial settings. Visits will include local manufacturing facilities, food processing plants and other large commercial of industrial operations in the Southeast Oklahoma region. (Prerequisites: SFTY 3553, SFTY 4003 and SFTY 4154)

**SFTY 4353 INDUSTRIAL HYGIENE** Practical application to explore the concepts and methodology for recognizing, evaluating, and controlling hazards and environmental stresses in the workplace that may result in occupational diseases and injuries. Must be taken the same semester as SFTY 4361, Industrial Hygiene lab. If either class (SFTY 4353 or SFTY 4361) is dropped, BOTH classes must be dropped and retaken. (Prerequisites: SFTY 1313 and 2003; complete gen educ MATH requirement)

**SFTY 4361 LAB INDUSTRIAL HYGIENE** A lab course designed to put into practice the tests, lab requirements and procedures outlined and instructed in the Industrial Hygiene course (SFTY 4353). Must be taken the same semester as SFTY 4353, Industrial Hygiene. If either class (SFTY 4353 or SFTY 4361) is dropped, BOTH classes must be dropped and retaken.

**SFTY 4413 PHILOSOPHY OF SAFETY EDUC** An exploration of the various philosophies of safety.

**SFTY 4600 INTERNSHIP** Supervised on-site experience in safety gained through work. Term report required. (Prerequisites: 15 semester hours of safety and approval of advisor)

**SFTY 4951 SENIOR SEMINAR** Required for all seniors. Emphasis on career planning and program assessment. (Prerequisite: advisor permission required)

**SFTY 4970 SPECIAL STUDIES** Individualized project selected in consultation with professor. (Permission Required)

**SFTY 4980 SEMINAR** Subject announced by department (Permission required)

**SFTY 5103 SAFETY PROGRAM MANAGEMENT (ADVANCED PRACTICUM)** Using current industry leadership, this course involves analysis of safety program organization, supervision and management.

**SFTY 5123 CRISIS PREPAREDNESS AND OCCUPATIONAL SECURITY** Studies will include homeland security, on-site safety, terrorist prevention, and threat reduction

**SFTY 5143 LEGAL LIABILITY AND WORKERS COMPENSATION** Advanced study of safety and health legal liability, regulatory compliance, ADA and workers compensation requirements

**SFTY 5153 OCCUPATIONAL SAFETY STATISTICS** The study of occupational safety statistics and probability in industrial and regulatory sampling. Course will cover hypothesis evaluation and distribution sets.

**SFTY 5163 CONSTRUCTION SAFETY II** Designed to aid students in identifying and solving advanced construction safety problems. Will include loss control and preventing techniques, training, and worker education unique to the construction industry.

**SFTY 5214 INDUSTRIAL HYGIENE II** Advanced analysis of industrial hygiene methods to facilitate recognition, evaluation and control of industrial and workplace hazards. Lab component is required.

**SFTY 5223 TOXICOLOGY** Advanced study of poisons and other toxic substances found in industrial and workplace settings

**SFTY 5233 ADVANCED ERGONOMIC ENGINEERING** Designed to allow students to apply ergonomic applications to industrial and commercial settings

**SFTY 5244 HAZMAT II** Advanced application and mitigation of hazardous material in the industrial, commercial and municipal environment

**SFTY 5253 PHILOSOPHY OF SAFETY MANAGEMENT** An exploration of various philosophies pertaining to occupational safety and their impact on past and current occupational safety initiatives

**SFTY 5263 INDOOR AIR QUALITY** An in-depth look at the hazards and causes of indoor air pollution as it relates to the effects on human health, property values, sales and litigation. The curriculum would include methods of recognition, evaluation, and controls of the various aspects which, after implementing, will lead to better indoor air quality for human occupants.

**SFTY 5273 FOOD SAFETY AND SANITATION** An in-depth study of safe practices for the food processing industry. Course looks at proper construction, Hazard Critical Control Points (HCCP), and proper sanitation (cleaning and pest control) in food processing as it relates to providing a safe commodity for consumers. The course addresses legal liability and regulatory compliance within the food processing industry.

**SFTY 5313 CURRENT LITERATURE IN OCCUPATIONAL SAFETY** A survey of current literature in occupational safety and health to include hazmat, management, systems safety, ergonomics, and homeland security.

**SFTY 5323 INTERNSHIP IN OCCUPATIONAL SAFETY** Supervised practicum in an occupational safety setting

**SFTY 5330 RESEARCH IN OCCUPATIONAL SAFETY** Research and study in occupational safety to explore ideas and reach solutions to current and future problems and challenges in the field.

**SOC 1113 # PRINCIPLES OF SOCIOLOGY** A survey course to introduce students to the science of human behavior. (A prerequisite for all other sociology courses)

**SOC 2213 # SOCIAL PROBLEMS** An examination of the major social problems found in our changing social environment. (Prerequisite: SOC 1113)

**SOC 3003 INTRODUCTION TO SOCIAL RESEARCH** An introduction to the empirical approaches and techniques in Sociology, including the study of both descriptive and inferential statistics.

**SOC 3223 # SOCIAL PSYCHOLOGY** An examination of the effects of social experiences and groups on the development of personality.

**SOC 3313 STATISTICS IN BEHAVIORAL SCIENCES** An examination of the philosophy and methods related to sociological research.(Prerequisite: SOC 1113 and 3003) (Previously listed as SOC 3123 Methods of Social Research)

**SOC 3323 # COLLECTIVE BEHAVIOR AND SOCIAL MOVEMENTS** Analysis of basic forms of collective behavior and their institutional and social psychological consequences.

**SOC 3343 # MEDICAL SOCIOLOGY** A study of the various factors associated with good health with an emphasis on factors more directly related to the aging process.

**SOC 3423 # URBAN SOCIETY** Description and interpretation of historical and contemporary trends in the urbanization process.

**SOC 3443 # AGING IN SOCIETY** An introduction to aging in America and the ramifications of an older population for the private and public sectors.

**SOC 3523 # JUVENILE DELINQUENCY** Analysis of research and theory related to the causes, extent, and correction of delinquency.

**SOC 3623 # RACE, GENDER AND ETHNIC RELATIONS** Historical and contemporary analysis of the social processes related to minority groups.

**SOC 3723 # THE FAMILY** A sociological and anthropological analysis of the family in social context.

**SOC 3823 # NATIVE AMERICAN CULTURES** An examination of the historical and cultural development of selected tribes.

**SOC 3883 INTRODUCTION TO SOCIAL WORK** An introduction to social work methods, programs, and private and public welfare agency settings.

**SOC 3950 FIELD EXPERIENCE IN SOCIAL WORK** Practical application of social work techniques. (Prerequisite: SOC 1113 and 3883)

**SOC 4113 # SOCIOLOGICAL THEORY** A historical survey of the development of sociological theory in Europe and America.

**SOC 4153 # SOCIOLOGY OF DEATH AND DYING** An examination of attitudes and practices related to death and dying in a cross-cultural perspective. Topics include funeral practices, the ethics of euthanasia, a child's view of death, and the problems of widowhood.

**SOC 4333 # CRIMINOLOGY** Summary of sociological research on crime, theories of criminal behavior, and trends in criminal law and correction.

**SOC 4383 # STRATIFICATION AND INEQUALITY** A survey of the theory and research related to rank structures in social systems.

**SOC 4533 # POPULATION DYNAMICS** An examination of the major variables related to demographic change and their relationship to social values and structures.

**SOC 4883 # COMPARATIVE CULTURES** A comparison of the cultural environments of selected literate and preliterate societies.

**SOC 4960 DIRECTED READING** Individualized readings in a variety of sociological topics. (Prerequisite: consent of instructor)

**SOC 4970 SPECIAL STUDIES** Special study of selected sociological topics. (Prerequisite: consent of instructor)

**SOC 4980 SEMINAR** Small group study of selected sociological areas of study. (Prerequisite: consent of instructor)

**SOC 4990 RESEARCH** Applied research on selected sociological topics. (Prerequisite: consent of instructor)

**SOC 5960 DIRECTED READINGS** Individualized readings in a variety of sociological topics. (Prerequisite: consent of instructor)

**SOC 5970 SPECIAL STUDIES** Special study of selected sociological topics. (Prerequisite: consent of instructor)

**SOC 5980 SEMINAR** Small group study of selected sociological areas of study. (Prerequisite: consent of instructor)

**SOC 5990 RESEARCH FOR MASTER'S THESIS** Applied research on selected sociological topics. (Prerequisite: consent of instructor)

**SOST 4133 METHODS & MEDIA IN SECONDARY SOCIAL STUDIES** (Required for social studies majors. Will not count on a major or minor in Social Studies. Prerequisite: admission to Teacher Education)

**SPAN 1113 # SPANISH FOR BEGINNERS** Intended for students who have had very little or no exposure to Spanish either in school or at home. Basic vocabulary, present tense, and cultural knowledge are covered.

**SPAN 1223 # SPANISH FOR REVIEW AND PROGRESS** Intended for students who have had limited exposure to Spanish in high school college, or at home. Assumes minimal previous knowledge of basic vocabulary and present tense. Expansion of vocabulary, language structure, and cultural knowledge.

**SPAN 2113 # INTERMEDIATE SPANISH I** A continuation of grammar and a communicative strategies. Emphasis on increasing fluency and familiarity with Hispanic cultures. (Prerequisite: SPAN 1223, appropriate CLEP score, or instructor's permission.)

**SPAN 2223 # INTERMEDIATE SPANISH II** Concluding presentation of key grammatical structures in Spanish. Further development of communicative strategies and knowledge of Hispanic cultures. (Prerequisite: SPAN 2113, appropriate CLEP score, or instructor's permission.)

**SPAN 2333 # SPANISH VOCABULARY BUILDING** Development and expansion of Spanish language skills by building a personal lexicon based on topical vocabulary, thematic conversation, and the study of common prefixes, suffixes, and conjugation patterns. (Prerequisite: SPAN 2113 or instructor's permission.)

**SPAN 3113 # SPANISH WRITTEN COMMUNICATION** Grammar and vocabulary learned in 1000 and 2000 level courses is reviewed, consolidated, and extended. The focus is on developing a more sophisticated and native-like writing ability (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 3123 # CONVERSATIONAL SPANISH** Building on introductory and intermediate knowledge, students express themselves orally on various topics and themes. Taught in Spanish (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 3133 # INTRODUCTION TO HISPANIC LITERATURE** Literary theory and works from both Spain and Latin America are examined within their historical and cultural contexts. The focus is on reading comprehension and cultural appreciation. (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 3143 # HISPANIC CIVILIZATION AND CULTURE** The people of Spain and Latin America are studied from their origins until modern times. Reading, writing, speaking, and listening comprehension skills will all be enhanced throughout the semester. (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 4113 # SPANISH PENINSULAR LITERATURE** Survey of major literary works and genres from the Middle Ages to present. (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 4133 # SPANISH GRAMMAR AND COMPOSITION** Presentation and applications of advanced grammatical structures. Students produce original texts in Spanish of varying types and lengths. (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 4143 # SPANISH ORAL PROFICIENCY** The focus is on improving listening comprehension skills and learning to communicate more fluently and at a more sophisticated level. (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 4160 SPECIAL PROJECTS** By special arrangement with a professor, the student or students will be able to take on individual or group study on a topic pertinent to their special interests. (Variable credit: one to three hours)

**SPAN 4183 # STUDY ABROAD IN SPANISH** An opportunity for students of Spanish to earn credit for their academic field experiences in Spanish-speaking countries. Currently enrolled students must seek pre-approval of Spanish faculty. Transfer students will have their cases evaluated individually. Pass/Fail only

**SPAN 4223 # LATIN AMERICAN LITERATURE** Survey of major literary works and genres from the Mayan Popol Vuh to the present. (Prerequisite: SPAN 2223 or instructor's permission)

**SPAN 4303 # SPANISH PHONETICS AND DIALECTS** Theory and practice of Spanish pronunciation, including survey of major dialect types and historical development of Spanish language (Prerequisite: SPAN 2223 or instructor's permission)

**SPCH 5123 ARGUMENTATION THEORY** This course is a basic study of argumentation theory from Aristotle's Syllogisms to Toulmin's model of argumentation. Students will be required to apply these constructs to modern debatable propositions.

**SPCH 5133 ADV HIGH SCHOOL FORENSICS** Students will learn advanced theory and activities to promote each of the secondary speaking and interpretative events.

**SPCH 5960 DIRECTED READINGS** Subject named in title listing. (Prerequisite: permission of the instructor)

**SPCH 5970 SPECIAL STUDIES** Subject named in the title listing. (Prerequisite: permission of the instructor)

**SPCH 5980 SEMINAR** Subject named in title listing. (Prerequisite: permission of instructor)

**SPCH 5990 RESEARCH** Subject named in title listing. (Prerequisite: permission of instructor)

**SPED 2123 INTRODUCTION TO INDIVIDUALS WITH EXCEPTIONALITIES** A study of the etiology and concepts relating to exceptional individuals and their inclusion in the public schools. (Prerequisite to enrollment in advanced special education courses. No concurrent enrollment)

**SPED 3103 FOUNDATIONS OF SPECIAL EDUCATION** Philosophical, historical, and legal foundations of special education. Introduction to roles and responsibilities of the special educator, and legal and ethical requirements of the profession. Theoretical perspectives related to the nature and needs of persons with disabilities.

**SPED 3313 ASSESSMENT** Introduction to measurement, assessment, and formative progress monitoring related to processes used with exceptional learners. Overview of norm-referenced assessment, interpretation, and the development of individual education programs. (Prerequisite: SPED 2123)

**SPED 3322 ADAPTIVE AND ASSISTIVE TECHNOLOGY** Introduction to the laws related to adaptive and assistive technology use, as well as the items, equipment, and product systems, whether acquired commercially, modified, or customized that are used to increase, maintain, or improve the capabilities of individuals with disabilities over a life span. Principles of Universal Design are included.

**SPED 3402 EARLY CHILDHOOD SPECIAL EDUCATION** Introduction to the issues, practices, and legal and ethical requirements associated with the provision of early childhood special education services. Field experience required.

**SPED 3512 PLANNING & MANAGING LEARNING FOR MILD/MOD DISAB** This course will focus on the strategies and techniques required to provide successful learning environments for students with mild/moderate disabilities.

**SPED 3613 BEHAVIOR MANAGEMENT** Managing individual and group behavior in classroom, school, home, and community environments in a range of special education contexts, use of technology as an organizational tool, Includes Applied Behavior Analysis. (Prerequisite: SPED 2123)

**SPED 4203 VOCATIONAL/TRANSITIONAL EDUCATION** An introduction and overview of programs and services for youth with disabilities that focus on career, vocational and transition services, including employment, personal and social skill development, and community living. The focus is on techniques, resources and models at all levels of service delivery. A conceptual framework for comprehensive transition planning and establishing the need for evidenced-based practices in transition planning will be highlighted. Other major issues explored: (a) federal legislation and initiatives relating to career education, vocational-technical education, and transition planning; (b) strategies for collaboration among the spectrum of professional roles that are central to the transition development and planning of students with disabilities; and (c) the role of cultural background in family orientation to transition planning.

**SPED 4413 TEACHING STRAT FOR STUDENTS W/COGNITIVE DISORDERS** Strategies for teaching children and adolescents with cognitive disabilities. Emphasis on accessing the general education curriculum through inclusion strategies and through individualized interventions and modifications including use of technology. (Prerequisite: SPED 2123)

**SPED 4423 TEACHING STRAT FOR STUDENTS W/AFFECTIVE DISORDERS** Strategies for changing behavior and teaching social skills curricula using scientifically-based decision making. Includes functional behavior analysis, behavior intervention plans, and positive behavioral supports. Includes nature



and needs of students with emotional/behavioral disorders and issues related to the affective education of cognitively disabled students. (Prerequisite: SPED 2123)

**SPED 4443 DIAG & REMED OF READING, LANG ARTS, MATH DISORDERS** Structured, sequential, multisensory instruction for students with reading, written expressions and/or mathematics disabilities (pre-Kindergarten through post-12). Focus on explicit, intensive teaching of decoding skills, phonemic awareness, sequencing, and attention strategies for students with dysnomia, dyslexia, dysgraphia, dyscalculia, and other learning disabilities.

**SPED 4712 COMM & COLLAB PARTNERSHIPS OF MILD/MOD DISABILITIE** Students will develop a variety of communication and collaborative skills. Emphasis will be placed on problem identification and problem solving, conflict management and resolution, and verbal and nonverbal communication strategies for effective interactions with professionals, paraprofessionals, and parents.

**SPED 4803 METHODS OF INSTRUC FOR STUD WITH MILD/MOD DISABIL** This course includes comprehensive organizational, and instructional techniques using a variety of strategies for teaching all curriculum areas for students with mild/moderate disabilities at the preschool through high school level.

**SPED 4903 SEMINAR IN SPECIAL EDUCATION TOPICS** Designed to provide advanced students theoretical and practical exposure to topical information that is emerging, changes in laws, and/or practical guidance in applied organizational and instructional techniques and areas associated with the student teaching process with students with mild/moderate disabilities at the preschool through high school levels

**SPED 5023 PROGRAM DEVELOPMENT & ORGANIZATIONAL IN SPEC EDUC** Knowledge of cognitive science, learning theory, and instructional technologies to improve instructional programs and the continuum of program options and services to ensure the appropriate instructional supports for individuals with exceptional learning needs.

**SPED 5033 RESEARCH, INQUIRY, AND EVIDENCE-BASED PRACTICE** Design and implementation of analysis and review of research to examine the effectiveness of instructional practices and methods for assessing and evaluating individuals and programs to identify and validate evidence-based practices.

**SPED 5043 STUDENT ASSESSMENT AND THE RtI PROCESS** Process and interpretation of assessments for determining eligibility for special education and methods and strategies for assessing and evaluating students' performance and success in general education curriculum.

**SPED 5063 COUNSELING, COLLABORATION, AND CO-TEACHING** Effective strategies for collaboration with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways to promote and advocate the learning and well being of individuals with ELN across a wide range of settings and a range of different learning experiences.

**SPED 5073 POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS** This course will prepare educators to work in schools to meet the unique behavioral needs of learners in K-12 environments through systemic, prevention focused, and data-based decision making. The course will prepare the educator to collaborate with other school professions to plan interventions to meet the needs of students who present challenging behaviors.

**SPED 5083 TEACHING STUDENTS WITH AUTISM** This course introduces students to Autism in children and youth. Topics include the historical and theoretical foundations of autism and current diagnostic criteria. Students will differentiate the characteristics of Autism including social, emotional, communication, behavioral, sensory-motor, and cognitive characteristics of children and youth with Autism. This class identifies the trends and issues associated with Autism and effective practices and strategies for structuring, managing and promoting social skill development and social interactions among learners with Autism.

**SPED 5093 APPLIED BEHAVIOR ANALYSIS FOR TEACHERS** This course promotes knowledge and skill in analyzing behavioral problems across a range of issues. Special consideration is given to designing interventions, implementing, managing, and supervising applied projects. Topics include the identification and selection of problems and target populations, analysis of problems and goals, designing measurement systems, developing interventions and disseminating products from applied behavioral research.

**SPED 5113 ADVANCED FOUNDATIONS OF SPECIAL EDUCATION** Philosophical, historical, and legal foundations of special education. Introduction to roles and responsibilities of the special educator, and legal and ethical requirements of the profession. Theoretical perspectives related to the nature and needs of persons with disabilities and how complex.

**SPED 5123 DEVELOPMENT, CHARACTER & INDIVIDUAL LEARN DIFFERENCES** The similarities and differences in human development and the characteristics between and among individuals with and without exceptional learning needs and how exceptional conditions can interact with the domains of human development and can impact families, as well as the individual's ability to learn, interact socially, and live as fulfilled contributing members of the community.

**SPED 5143 ADV INSTRUCT STRAT FOR INDIVID W MILD/MOD DISABIL** Evidence-based instructional strategies to individualize instruction for individuals with ELN and how to select, adapt, and use these instructional strategies to promote challenging learning results in general and special curricula and to appropriately modify learning environments for individuals with ELN. Emphasis on the development, maintenance, and generalization of knowledge and skills across environments, settings, and the lifespan.

**SPED 5153 LEARNING ENVIRONMENTS AND SOCIAL INTERACTIONS** Learning environments for individuals with ELN that foster cultural understanding, safety and emotional well being, positive interactions, and active engagement of individuals with ELN.

**SPED 5162 DEVELOPMENT OF LANGUAGE SKILLS** Typical and atypical language development, the ways in which exceptional conditions can interact with an individual's experience with and use of language, and individualized strategies to enhance language development and teach communication skills to individuals with ELN.

**SPED 5233 SPECIAL EDUCATION LAW** This course will deal extensively with federal/state legislation and case laws and regulations and with administrative and civil court actions in the determination of the status of services to children with disabilities. The role of executive, legislative and judicial bodies will be examined vis a vis legal, ethical, and procedural parameters that provide direction for school practitioners and policy makers.

**SPED 5314 EARLY CHILDHOOD SPECIAL EDUCATION** A study of the history, philosophy, methods, and theories for educating the young child with disabilities from birth through eight years with particular emphasis on using developmental knowledge of young children's characteristics and needs to create effective learning environments.

**SPED 5443 DIAGNOSIS AND REMEDIATION OF MATH-RELATED DEFICITS** Focus on cognitive math-related deficits in processing, sequencing, and memory and the mathematics specialist's role in preassessment. Curriculum-based assessment and teacher-administered measures will be utilized to determine their role in formulating multiple remediation strategies. Technology use as an aid to remediation will be demonstrated.

**STAT 2153 STATISTICAL METHODS** Fundamental concepts of probability, random variables and basic distributions, sample means and variances, statistical inference for means including both large sample theory and small sample theory, linear regression and correlation, use of commercial software statistical packages. (Prerequisite: MATH 1513)

**STAT 3363 # PROBABILITY THEORY** Sets, probability in finite and infinite spaces, counting methods, random variables, probability distributions, game theory. (Prerequisite: MATH 2215)

**STAT 4353 # MATHEMATICAL STATISTICS** Design of experiments and investigations, statistical inference, probability and combinatorial methods, discrete and continuous distributions, expected values, sampling, point estimation. (Prerequisite: MATH 2215)

**STAT 4463 # PROBABILITY THEORY II** Probability distributions, jointly distributed random variables, multinomial probability laws, moment-generating functions, limit theorems, stochastic processes. (Prerequisite: STAT 3363 or STAT 4353)

**STAT 4970 SPECIAL STUDIES**

**STAT 4980 SEMINAR**

**STAT 5153 STATISTICAL ANALYSIS** Study of various statistical procedures and routines utilized in data analysis and hypothesis testing including simple and multiple regression analysis and nonparametric statistics. (Prerequisite: STAT 2153 or equivalent)

**STAT 5970 SPECIAL STUDIES**

**STAT 5980 SEMINAR**

**TBN 1510 TROMBONE LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**TBN 2510 TROMBONE LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TBN 3510 TROMBONE UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TBN 4510 TROMBONE UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TECH 1093 INTRODUCTION TO COMPUTER GRAPHICS APPLICATIONS** A study of basic computer graphic applications to include scanners, digital video, digital cameras, related computer hardware, color and laser printers, image formats, storage media, internet imaging, NetMeeting, and photographic images. Software for image enhancement and Office graphics. Power Point graphics assignments.

**TECH 1263 COMPUTER SYSTEMS MAINTENANCE** Introductory course emphasizing computer purchasing, repair, installation, upgrades, and maintenance.

**TECH 2023 # BASIC PHOTOGRAPHY** Use of the camera to capture visual images. Composition, camera and its accessories, applications including portraiture, landscapes, people, commercial, school, and documentary. How photographic images shape and are shaped by the culture in which they are used. Digital camera fundamental and computer photo editing. Students will have experiences with film and darkroom but must provide a digital camera. Term album of liberal arts theme required.

**TECH 2113 MATERIALS & PROCESSES I** A fundamental course emphasizing the mechanical and physical properties of materials which must be considered in the selective process such as stress, elasticity, erosion, heat transfer, compatibility, and availability. A study of the broad spectrum of technological process on the elementary applications of forming, joining and shaping materials using both hand and machine tools.

**TECH 2123 CONSTRUCTION BLUEPRINT ANALYSIS** Study of construction blueprint fundamentals, procedures, and estimating. Emphasis on residential and commercial facilities.

**TECH 2383 COMPUTER AIDED DRAFTING AND DESIGN I** A beginning graphics course introducing Computer Aided Drafting and Design (CADD). Drafting fundamental. AutoCAD emphasis. (Previously listed as TECH 3383).

**TECH 3053 GRAPHIC DESIGN AND DIGITAL IMAGERY** An intensive experience with computer graphics applications. Topics include image manipulation, three dimensional graphics, animation and streaming techniques. Portfolio required. (Prerequisite: TECH 1093)

**TECH 3063 COMPUTER AIDED DRAFTING AND DESIGN II** Continuation of TECH 2383. Mastery of CADD commands to assure speed and accuracy. AutoCAD emphasis. Advanced concepts to include paper space, XREF, auxiliary views, multi-views, geometric tolerancing, English metric conversions, and maintaining a CAD computer station. 2-D isometric and 3-D drawings. Portfolio required. (Prerequisite: TECH 2383) (Previously listed as TECH 4453)

**TECH 3193 COMPUTER GRAPHIC IMAGING** Continuation of TECH 1093. Computer generation and manipulation of images using Adobe and Corel Draw suite. Advanced Powerpoint assignments including animation and sound. Optimizing images for the internet. Portfolio required with CD-R assignments. (Prerequisite: TECH 1093)

**TECH 3213 ARCHITECTURAL DRAWING** Preparation of a complete set of house plans meeting minimum property standards including plot plans, foundation plans, floor plans, elevations, construction details, and interior details and specifications sheet. (Prerequisite: TECH 3063)

**TECH 3363 NUMERICAL CONTROL PROGRAMMING** Computer numerical control (CNC) of industrial manufacturing processes such as of lathes, milling machines, and robotics. Training in writing and use of computer programs to increase industrial production with precise tolerance. (Prerequisite: TECH 2113 and TECH 2383)

**TECH 3403 COMPUTER AIDED MANUFACTURING** Computer Aided Manufacturing (CAM), Computer Aided Design (CAD), off-station programming, machine codes, and programming language. (Prerequisite: TECH 2383)

**TECH 4263 DIGITAL VIDEO TECHNOLOGY** Essential tools for multimedia video production. Experiences in recording, editing and utilizing digital video and accompanying audio. (Prerequisite: TECH 1093)

**TECH 4303 ELECTRONIC DRAFTING** Device symbols, production drawings, block elementary and schematic diagrams, miniaturization, industrial controls and automation, drawings for electrical power and architectural plans. Includes computer generated graphics. (Prerequisites: EET 2083)

**TECH 4343 WEB PAGE DESIGN II** Continuation of TECH 2143. Hands on design and creation of web sites using current technologies including HTML and development applications. Students must maintain a web site. (Prerequisite: TECH 1093 and TECH 2343)

**TECH 4553 PROBLEM SOLVING IN TECHNOLOGY** Capstone course to provide management-level problem solving experiences from the technology fields of power technology, drafting and design, manufacturing and electronics. (Prerequisite: Departmental permission)

**TECH 4700 INTERNSHIP** Supervised on-site experience in Technology gained through work. Term report required. (Prerequisite: 15 semester hours in Technology and advisor approval)

**TECH 4951 SENIOR SEMINAR** Capstone course required for all seniors in Option C. Topics include career planning. Program assessment, research paper and presentation. (Prerequisite: senior standing)

**TECH 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisites: 18 hours of Technology and permission of the Department Chair)

**TECH 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisites: 18 hours of Technology and permission of the Department Chair)

**TECH 4980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 18 hours of Technology and permission of the Department Chair)

**TECH 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisites: 25 hours of Technology and permission of the Department Chair)

**TECH 5213 INDIVIDUAL PRODUCTIVITY IN TECHNOLOGY** Personal goal-setting and time management; study of personality, temperament, behavior, and personal motivation; contemporary concepts of excellence and quality in organizations; negotiations in the work-place.

**TECH 5223 PRODUCTION SYSTEMS DESIGN** Facility location, layout, and design, materials and cost controls, maintenance, processing systems, and safety engineering.

**TECH 5333 PRODUCTION SYSTEMS CONTROL** Production budgeting and planning cycles, purchasing, production planning, scheduling, expediting, inventory, forecasting, and quality control.

**TECH 5443 PRACTICUM** Cooperative internship. On-the-job experiences in practical applications and solutions to special problems.

**TECH 5970 INDIVIDUAL STUDY IN TECHNOLOGY** Individualized projects selected in consultation with faculty member. (Permission required)

**TECH 5980 SEMINAR IN TECHNOLOGY** Small group study of topic announced by department.

**TECH 5990 RESEARCH FOR MASTER'S THESIS** Independent investigation designed in consultation with the professor. (Prerequisite: department approval) Maximum of 6 hours credit.

**THTR 1113 # INTRODUCTION TO THEATRE** Gives students a broad based survey of theatre arts; instills an appreciation of theatre; explores professional aspects of the theatre.

**THTR 1123 PROFESSIONAL THEATRE TRAINING WORKSHOP** Designed for the beginning professional theatre trainee in total repertory instruction ranging from acting classes, technical theatre, lecture and laboratory instruction. Students participate in all productions in a repertory situation. (Summer Term Only)

**THTR 1133 INTRODUCTION TO TECHNICAL THEATRE** This course will introduce the student to a basic understanding of principles of scenic design, lighting design, and other technical aspects of the theatre. (Prerequisite: THTR 1113 or permission of instructor)

**THTR 1143 # THEATRE APPRECIATION: FROM MASKS TO MUSICAL** In this course theatrical performance will be examined and compared in various forms, including script, taped performance, commercial films, and live performances by theatre groups in the region. This course will develop appreciation and awareness of the effect that theatre artists and technicians have on drama and develop aesthetic standards for evaluation of theatrical presentations.

**THTR 1152 DANCE I** This course is an introduction to basic tap and ballet technique with a strong emphasis on vocabulary. The class will consist of learning fundamental philosophies, body alignment, arm positions and basic positions of the feet. Performance opportunities will not be provided. The curriculum will accommodate the introductory student.

**THTR 1162 DANCE II** This course is a beginner level of basic tap and ballet technique with a strong emphasis on vocabulary. The class will consist of reinforcing and expanding fundamental philosophies, body alignment, arm positions and basic foundations of the two disciplines. Performing opportunities may be provided. The curriculum will accommodate the beginning student.

**THTR 1183 # FILM APPRECIATION** In this course students will explore basic and cultural trends through a close study of a variety of important films throughout the medium's history. The course will establish critical criteria for evaluating films and expose students to the basic technical elements of the film artist's process

**THTR 1213 # INTRODUCTION TO ACTING** This beginning course introduces the beginning student to acting. It begins by developing concentration, characterization, physical agility, and creativity through the use of improvisation, pantomime, monologues and directing.

**THTR 1221 IMPROVISATION CHILDREN'S THEATRE** Extensive study and practice of the improvisational theatre medium. Using children's stories as the script and adapting them to modern terminology and action, the craft becomes centered on fast and creative thinking and action within a group performance. (Prerequisite: permission of instructor; may be repeated up to four hours credit)

**THTR 1232 ACTING-IMPROVISATION** To provide the beginning and advanced actor the opportunity to experiment with the playfulness that leads to creativity.

**THTR 1271 POINTE I** This course is an introduction to pointe technique with a strong emphasis on vocabulary. The class will consist of learning body alignment, leg/foot strengthening exercises and basic precautions to take care for the feet once pointework has begun. Performance opportunities will not be provided. The curriculum will accommodate the introductory pointe student.

**THTR 1312 # CHARACTER ANALYSIS** This course, reflecting the disciplines of theatre, history, psychology and art, includes research into the psychological and sociological motivations of characters as well as a survey of historical periods in dramatic literature from Greece to the present time. Approximately ten (10) representative plays reflecting ten (10) genres or periods are selectively chosen, studied, and presented in an acting format as well as in written analysis with the inclusion of costume and scenic demands represented. By the end of the term the student should have a broad general knowledge of period styles as well as an overview of character analysis. (Prerequisites: THTR 1113 and 1213 or permission of instructor)

**THTR 1510 MUSICAL THEATRE VOICE I** Individual instruction in voice, keyboard and orchestral instruments. (May be repeated for credit)

**THTR 1552 STAGE MAKEUP** In this course, the student will understand the basic techniques of stage makeup and develop a basic understanding through hands-on training with a variety of makeup types.

**THTR 1660 THEATRE PRACTICUM** This course allows the student work in all areas of theatre practicum during an instructed work call. It may be in set building, painting, costumes, props, publicity and/or box office for a certain number of hours each week so that a practical knowledge of the working theatre may be obtained. (Repeatable up to a maximum of four credit hours.)

**THTR 2152 DANCE III** This course is an intermediate to advanced beginner level of tap and ballet technique with a strong emphasis on vocabulary. The class will consist of combining steps resulting in a specific dance construction. Performing will be required. The curriculum will accommodate the intermediate to advanced beginner student.

**THTR 2162 DANCE IV** This course is an advanced beginner to beginner intermediate level of tap and ballet technique with a strong emphasis on vocabulary. The class will consist of combining more complicated steps resulting in a specific rhythmic and/or dance construction. Performing will be required. The curriculum will accommodate the advanced beginner to beginner intermediate student.

**THTR 2172 DANCE WORKSHOP** This course is an intermediate level of dance technique in a discipline to be determined by the instructor.

**THTR 2183 # FILM GENRES** Students will explore various film genres (the western, the gangster movie, film noir, etc.) and film theories (auteurism and viewer identification theory) and will acquire a critical vocabulary appropriate to the art form.

**THTR 2203 MOVEMENT FOR THE THEATRE ARTIST** This is an introductory level of movement course in varying disciplines to be determined by the instructor.

**THTR 2233 # FUNDAMENTALS OF ORAL INTERPRETATION** Focuses on the ability to transfer the author's meaning from the printed page to the audience's mind. Units on poetry, prose, and dramatic literature are included. (Same as COMM 2233)

**THTR 2271 POINTE II** This course is a beginner level of basic pointe technique with a strong emphasis on vocabulary. The class will consist of reinforcing and expanding fundamental philosophies, body alignment, arm positions and basic foundations of pointe. Performing opportunities will not be provided. The curriculum will accommodate the beginning student.

**THTR 2753 FUNDAMENTALS OF THEATER DESIGN** Students will execute class projects in costume, scenery, lighting, makeup, sound, properties and special effects. (Prerequisite: THTR 1133 or permission of instructor)

**THTR 3013 MUSICAL THEATRE PERFORMANCE I** The practical application of acting, singing, and movement techniques to various styles of period and contemporary musical theatre works. (Prerequisites: THTR 1113, 1213, 1312, MUS 1213, or permission of instructor.)

**THTR 3023 # HISTORY OF MUSICAL THEATRE** This course will be a chronological study of major periods from nineteenth century English music halls to the present time as it relates to musical theatre. It will include, but not be limited to, operettas, cabarets, follies, and traditional musicals. (Prerequisites: THTR 1113,1213.)

**THTR 3033 MUSICAL THEATRE PERFORMANCE II** Advanced application of acting, singing, and movement techniques to the various styles of period and contemporary music theatre works. Includes staging and choreography of scenes, culminating in a live performance. (Prerequisite: THTR1113, 1213, 1312, MUS 1213 or permission of instructor)

**THTR 3043 MUSICAL THEATRE AUDITION** Course emphasizes creating a resume, types of interviews, obtaining an agent, personal appearance, and dress as well as work on audition material, ranging from musicals to stock productions. (Prerequisite:THTR 1113, 1213, 1312, MUS 1213, or permission of instructor.)

**THTR 3152 DANCE V** This course is a beginner intermediate level of tap and ballet technique with a strong emphasis on vocabulary. The class will consist of combining longer, more complicated elements demonstrating rhythmic accuracy and qualitative understanding of musical nuances by moving on the beat and anticipating it when required. Performing and interpreting will be required. The curriculum will accommodate beginner intermediate to intermediate level student.

**THTR 3162 DANCE VI** This course is an intermediate to advanced intermediate level of tap and ballet technique with a strong emphasis on vocabulary. The class will consist of combining longer, more complicated elements giving the students a grasp of classroom exercises and combinations. Performing and interpreting will be required. The curriculum will accommodate the intermediate to advanced intermediate student.

**THTR 3172 CHOREOGRAPHY** This course is an intermediate/advanced level of differing dance techniques and how the fundamentals can be made into choreography. References will also be made to

facilitate the teaching of choreography. The curriculum will accommodate the intermediate to advanced student and those students interested in becoming instructors and/or choreographers.

**THTR 3183 # FILM AND CULTURE** Students will explore the principles of film appreciation and analysis through lecture, readings, and viewing of films and film excerpts from the American experience in the medium. Students will also examine advanced film analysis, including the principles of montage, camera movement, lighting, sound, directing, acting and how these have been influenced by American artists and the Hollywood industry.

**THTR 3271 POINTE III** This course is an intermediate level of pointe technique with a strong emphasis on vocabulary. The class will consist of combining steps resulting in a specific dance construction. Performing will be suggested. The curriculum will accommodate the intermediate student.

**THTR 3333 STAGE MANAGEMENT** This course will examine the different responsibilities and problems of a stage manager's job for commercial, community and educational theatre. Stage management will contain both lecture and hands-on training. (Prerequisites: THTR 1113 and 1133, or permission of instructor)

**THTR 3342 COSTUMING** In this course, the students will learn basic costume construction techniques, fundamental costume design techniques, and apply these techniques in building and designing costumes for theatrical productions.

**THTR 3423 SCENE DESIGN** The class will examine the advantages, problems and practices for designing scenery for the thrust, proscenium and arena stages. The student will practice the fundamental aspects of drafting for the stage as well as the study of the use of advanced stagecraft techniques. (Prerequisites: THTR 1113 and 1133, or permission of instructor)

**THTR 3432 DIRECTING** This course provides intensive study of text with repeating exercises to illustrate; projects given in which blocking plans are selected with and without live actors; critiques both written and oral; and final project of direction and prompt book for a ten minute scene. (Prerequisites: THTR 1113, 1213, 1133, and 3423, or permission of instructor)

**THTR 3453 LIGHTING DESIGN** This class is designed to help the student understand the variety of different types of lighting equipment and control boards available today; to help him understand the basic elements of lighting design as it applies to stage composition, color and other aspects related to a specific show; to give the student practical experience working with a lighting design; and to enable the student to do a basic lighting design for a specific show. (Prerequisites: THTR 1113 and 1133; or permission of instructor)

**THTR 3510 MUSICAL THEATRE VOICE II** Individual instruction in voice, keyboard and orchestral instruments. (May be repeated for a maximum of 8 credit hours)

**THTR 3523 # HISTORY OF THEATRE TO 1700** This course will be a chronological study of major periods from beginnings of theatrical expression to 1700 as it relates to theatre.

**THTR 3623 # HISTORY OF THEATRE: 1700 TO PRESENT** This course will be a chronological study of major periods from 1700 to the present time as it relates to theatre.

**THTR 3783 THEATRE PUBLICITY & PROMOTION** This course introduces the student to the all important areas of publicity and promotion by the task of developing a publicity schedule of stories, pictures, radio and perhaps video tapes, manning the box office, working with special sales with various groups, writing stories, taking or facilitating taking and dispersal of pictures and stories to many newspapers, radio stations, etc. The student will also work with reservations and house management. (Prerequisite: THTR 1113 or permission of instructor)



**THTR 3883 CHILDREN'S THEATRE & CREATIVE DRAMA** A beginning study of children's theatre forms--improvisation, theatre games, creative dramatics--with performance skills and communication in mind.

**THTR 3942 ACTING WORKSHOP: AUDITION** To provide the student with the practical solutions to the problems of auditioning. (Prerequisites: THTR 1113, 1213, and 1312, or permission of instructor)

**THTR 3963 # ACTING WORKSHOP: PERIOD STYLES** This course includes a survey of acting styles for the theatre from Greece to contemporary America as reflected through theory and criticism, architecture, costume, furniture, and acting. At least eight major characters from representative plays are studied and presented. (Prerequisite: THTR 1113, 1312 or permission of instructor.)

**THTR 4013 MUSICAL THEATRE WORKSHOP** Students will explore contemporary music theatre production through research, rehearsal and performance for the public of a smaller musical theatre work. (Prerequisite: THTR 1133, 1552, 3013 and/or permission of instructor.)

**THTR 4152 DANCE VII** This course is an advanced intermediate to beginner advanced level of tap and ballet technique with a strong emphasis on vocabulary. The class will consist of giving the student a refined sense of initiation and articulation of movement through combining complex steps resulting in across the floor progressions and/or dance construction. Performing, composing and interpreting will be required. References will also be made to facilitate the teaching of tap and ballet technique. The curriculum will accommodate the advanced intermediate to beginner advanced student.

**THTR 4162 DANCE VIII** This course is a beginner advanced to intermediate advanced level of tap and ballet technique with a strong emphasis on vocabulary. The class will consist of giving the student a refined sense of the body in relation to itself and to the space through combining complex steps resulting in across the floor progressions and/or dance construction. Performing, composing and interpreting will be required. References will also be made to facilitate the teaching of tap and ballet technique. The curriculum will accommodate the beginner advanced to intermediate advanced student and those students interested in becoming instructors of tap or ballet.

**THTR 4172 DANCE AUDITION** This course is an advanced level course in auditioning. The class will consist of combining steps resulting in a specific combination and/or dance construction. Performing, composing and interpreting will be required. References will also be made to facilitate the art of teaching technique. The curriculum will accommodate the advanced student and those students interested in becoming instructors, performers, and/or choreographers.

**THTR 4222 STAGE DIALECTS** This course gives the actor and/or director practical understanding of several dialects common to stage use such as: British, Cockney, Southern, Southwestern, Massachusetts, New Jersey, German, French, Spanish. (Prerequisites: COMM 1003 and 1213, or permission of instructor)

**THTR 4232 ADVANCED PERFORMANCE** This course allows the advanced actor a chance for a recital which will include monologues, scenes, pantomimes, songs, and dances from several periods or styles. The thrust will be to show the best of his craft in public performance.

**THTR 4250 DANCE COMPANY** This course is an advanced level of many different techniques for a strong emphasis on performance. Open to all University students by audition.

**THTR 4271 POINTE IV** This course is an intermediate level of pointe technique with a strong emphasis on vocabulary. The class will consist of combining steps resulting in a specific dance construction. Performing will be suggested. The curriculum will accommodate the intermediate student.

**THTR 4313 THEATRE ADMINISTRATION & MANAGEMENT** The course will examine several principles and practices of theatre management for commercial, university, community and educational theatre. (Prerequisite: THTR 1113 or permission of instructor)

**THTR 4332 ADVANCED LIGHTING DESIGN** A course for the advanced lighting design student. The student will put into application the principles of lighting design in a practical project. (Prerequisite: THTR 3453 or permission of instructor)

**THTR 4342 DESIGN INTERNSHIP** A course for the advanced design student. Students will design a show from start to finish for an actual performance. (Prerequisites: THTR 3423 and 3453, or permission of instructor)

**THTR 4382 ADVANCED SCENE DESIGN** A course for the advanced design student in a further study of contemporary designers, culminating in a class project. (Prerequisite: THTR 3423 or permission of instructor)

**THTR 4412 DIRECTING WORKSHOP** This course trains the student to explore the productional planning process, see to its execution, and realize a full product in the form of a one-act play. (Prerequisite: THTR 3432 or permission of instructor)

**THTR 4422 DIRECTING INTERNSHIP** In this course, the directing student gets practical experience in directing a full length play, including selection, casting, blocking, interpretation and post production analysis. (Prerequisite: THTR 3432, 4412, and permission of instructor)

**THTR 4430 CHORVETTES** Open to all university students by audition. A group of student entertainers specializing in popular music. (May be repeated and taken for one or two hours credit)

**THTR 4572 ADVANCED COSTUME DESIGN** A course for the advanced costume design student in a further study of a special design period culminating in a project. (Prerequisites: THTR 3343 or permission of instructor)

**THTR 4673 # THEORY AND CRITICISM OF DRAMATIC LITERATURE** This course will acquaint the student with a representative dramatic literature as it reflects the critical theories of the time.

**THTR 4683 CHILDREN'S THEATRE WORKSHOP** A practicum-oriented study of children's theatre forms as they apply to working with children in workshop and production. (Summer Term Only)

**THTR 4752 ACTING WORKSHOP:THE METHOD** An intensive study of the various elements of sense and emotional memory in the Stanislavsky system of acting as they relate to various monologues and scenes selected for audition and/or study. (Prerequisite: THTR 1113, 1213 and 1312 or permission of instructor.)

**THTR 4772 PATTERN DEVELOPMENT** The student will learn flat patterning, draping, cutting, advanced construction techniques and fitting for period and contemporary stage costumes. (Prerequisites: THTR2122 or permission of instructor.)

**THTR 4803 CREATIVE EXPRESSION IN THE ELEMENTARY SCHOOL** This course will provide elementary teachers with skills and games to promote oral activities, creative dramatics, movement, and dance in elementary age children.

**THTR 4960 DIRECTED READING** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 4970 SPECIAL STUDIES** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 4980 SEMINAR** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 4990 RESEARCH** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 5113 PRODUCING THE HIGH SCHOOL PLAY** A comprehensive study of theatrical productions in high schools dealing exclusively with live theatre. Descriptions of various branches of the

profession and how they are currently structured, and a study of principles to strengthen theatre practice both economically and artistically.

**THTR 5223 CLASSICAL THEATRE** An aggregate study of place of performance, style of acting, conventions of setting, movement in costume, occupations, manners, dance, and music from Greek through Restoration theatre.

**THTR 5960 DIRECTED READINGS** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 5970 SPECIAL STUDIES** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 5980 SEMINAR** Subject named in title listing. (Prerequisite: permission of instructor)

**THTR 5990 RESEARCH** Subject named in title listing. (Prerequisite: permission of instructor)

**TPT 1510 TRUMPET LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**TPT 2510 TRUMPET LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TPT 3510 TRUMPET UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TPT 4510 TRUMPET UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TUBA 1510 TUBA LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**TUBA 2510 TUBA LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TUBA 3510 TUBA UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**TUBA 4510 TUBA UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**VCE 1510 VOICE LOW SEC** Individual instruction in voice, keyboard, or orchestral instrument. (Field of study is course title. May be repeated for credit.)

**VCE 2510 VOICE LOW MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**VCE 3510 VOICE UPP SEC** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**VCE 4510 VOICE UPP MAJOR** Individual instruction in voice, keyboard, and orchestral instruments. (Field of study is course title. May be repeated for credit.)

**VCE 5510 VOICE GRADUATE** Graduate applied music. (Field of study is course title)

**ZOOL 2114 # GENERAL ZOOLOGY** The major concepts of zoology, as illustrated by animal life. With laboratory. (Prerequisite: BIOL1404)

**ZOOL 3134 # FIELD ZOOLOGY** Identification, taxonomy, life histories, and ecology of the vertebrates. With laboratory. (Prerequisites: ZOOL 2114)

**ZOOL 3643 # WILDLIFE DISEASES** The cause, nature, mode of transmission, and prevention of common bacterial, viral, parasitic, and other types of diseases of wild animals. Emphasis will be on how diseases impact individuals and populations of wild vertebrates. (Prerequisites: ZOOL 2114)

**ZOOL 4134 # AQUATIC INVERTEBRATE TAXONOMY** A field and laboratory study of aquatic invertebrate phyla including immature insects. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4234 # ENTOMOLOGY** Fundamental principles of insect life; classification, life histories, and ecologic relations. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4334 # ICHTHYOLOGY** Taxonomy, distribution, natural history, and economic importance of fishes. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4433 # ANIMAL BEHAVIOR** Analysis of the organization, function, and causation of animal behavior. Adaptiveness of behavior of vertebrates, techniques used to study behavior, and use of behavior to clarify evolutionary relationships will be emphasized. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4524 # HERPETOLOGY** Life histories, distributions, ecology, behavior, evolution, systematics, and techniques of collection and preservation of reptiles and amphibians of North America. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4534 # ORNITHOLOGY** Classification, distribution, economic value, identification, life histories, morphology, preparation of specimens. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4543 FIELD ORNITHOLOGY** Field trip to unique ecosystems to study bird identification, habitat relationships, ecology, behavior, census techniques, and conservation. (Prerequisites: ZOOL 4534 and permission)

**ZOOL 4634 # MAMMALOLOGY** Classification, distribution, life histories, economic importance, techniques of field study. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 4960 DIRECTED READING** Individualized literature study selected in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**ZOOL 4970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**ZOOL 4980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 20 hours of Biological Sciences)

**ZOOL 4990 RESEARCH** Independent investigation designed in consultation with the professor. (Prerequisite: 20 hours of Biological Sciences and permission)

**ZOOL 5334 ICHTHYOLOGY** Taxonomy, distribution, natural history, and economic importance of fishes. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 5524 HERPETOLOGY** Life histories, distributions, ecology, behavior, evolution, systematics, and techniques of collection and preservation of reptiles and amphibians of North America. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 5534 ORNITHOLOGY** Classification, distribution, economic value, identification, life histories, morphology, preparation of specimens. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 5543 FIELD ORNITHOLOGY** Field trip to unique ecosystems to study bird identification, habitat relationships, ecology, behavior, census techniques, and conservation. (Prerequisites: ZOOL 4534 and permission)

**ZOOL 5634 MAMMALOGY** Classification, distribution, life histories, economic importance, techniques of field study. With laboratory. (Prerequisites: ZOOL 2114 and BIOL 3414)

**ZOOL 5920 PROBLEMS IN ZOOLOGY** Independent study designed in consultation with the professor. (Prerequisite: 15 hours of biological science and permission)

**ZOOL 5960 DIRECTED READINGS** Individualized literature study selected in consultation with the professor. (Prerequisite: 15 hours of biological science and permission)

**ZOOL 5970 SPECIAL STUDIES** Individualized project selected in consultation with the professor. (Prerequisite: 15 hours of biological science and permission)

**ZOOL 5980 SEMINAR** Small group study of topics announced by department. (Prerequisite: 15 hours of Biological Sciences and permission)

**ZOOL 5990 RESEARCH** Independent investigation designed in consultation with the professor. Limited to a maximum of six credit hours. (Prerequisite: 20 hours of Biological Sciences and permission)