A&M-CENTRAL TEXAS COURSE DESCRIPTIONS

Accounting (ACCT)

ACCT 3300. Accounting Concepts. 3 Semester Credit Hours.
Learn basic accounting principles, concepts, and methods to include a review of general purpose financial statements and the accounting process. Financial accounting procedures are presented to support the overall managerial function. Used to provide for students without a previous accounting background. (Meets requirements for Accounting I.).

ACCT 3301. Analysis - Using Spreadsheets. 3 Semester Credit Hours.
Learn theory and application of microcomputer spreadsheet technology applied in accounting, finance, management, and other business disciplines. Stimulate creative initiative and to develop basic skills in performing common business tasks. Credit for both CIS 3301 and ACCT 3301 will not be awarded. Prerequisite(s): ACCT 2301.

ACCT 3302. Cost Accounting. 3 Semester Credit Hours.
Learn accounting for material, labor, and manufacturing expenses in both job order and process cost systems. Special emphasis will be given to distribution of service department cost and costing of byproducts and joint products.

ACCT 3303. Intermediate Accounting I. 3 Semester Credit Hours.
Study the environment of accounting, development of standards, basic theory, financial statements, worksheets, and the application of generally accepted accounting principles for the business enterprise with emphasis on corporations. Prerequisite(s): ACCT 2301 or permission of department chair.

ACCT 3304. Intermediate Accounting II. 3 Semester Credit Hours.
Continue the study of Intermediate Accounting with a special emphasis on generally accepted accounting principles as applied to the business enterprise. Prerequisite(s): ACCT 3303 or permission of department chair.

ACCT 3305. Governmental Accounting. 3 Semester Credit Hours.
Learn budgeting, accounting, and financial reporting principles and practices for governmental and other not-for-profit entities. Prerequisite(s): ACCT 3303 or permission of department chair.

ACCT 3307. Writing for Accountants. 3 Semester Credit Hours.
(WI) Learn how to improve communication skills for those entering the accounting profession. Study written communication including letter writing, memos, emails, reports, employment resumes, and writing for publication. Special emphasis on organization of thought, critical thinking, and accounting research.

ACCT 3308. Managing Accounting. 3 Semester Credit Hours.
Study the uses of accounting information by management. Accounting procedures and reports essential to management are emphasized, as are cost analysis, cost control, budgeting, and controllership. Prerequisite(s): ACCT 2301 or permission of department chair. Course cannot be counted as part of a degree program for an accounting major.

ACCT 3310. Accounting Information Systems. 3 Semester Credit Hours.
Study the design and implementation of complex accounting information systems. Understand the traditional accounting model and its relationship to each type of accounting information system, including accounts receivable, inventory control, cost accounting, operational budgeting, and capital budgeting. Special emphasis on key elements of a well-designed management control system. Prerequisite(s): ACCT 2301.

ACCT 3337. Cooperative Education. 1-3 Semester Credit Hours.
Integrate academic study with work experience that is relevant to a major or minor. Two-semester minimum requirement that may be accomplished by 1) alternating semesters of full-time study with semesters of curriculum-related employment, or 2) enrolling in courses at least half-time (6 semester hours) and working part-time in parallel positions of curriculum-related employment. Cooperative Education advisor will supervise and assign the final grades. Students may participate in the Cooperative Education but will earn only a maximum of 6 hours credit toward a degree. Prerequisite(s): Completion of 30 semester hours which includes 12 hours in the major or minor discipline in which the Cooperative Education course is desired, minimum overall GPA of 2.5 and a minimum GPA of 3.0 in the appropriate major or minor field, and permission of department chair. Field experience fee $75.

ACCT 4301. Intermediate Accounting III. 3 Semester Credit Hours.
Study financial statement analysis and accounting topics related to financial statement presentation and disclosure. Prerequisite(s): ACCT 3304 or permission of department chair.

ACCT 4303. Advanced Accounting. 3 Semester Credit Hours.
Analyze special phases of partnership accounting, joint ventures, consignments, installment sales, statement of affairs and accounting for insolvent concerns, and business combinations. Prerequisite(s): ACCT 4301 or concurrent registration.

ACCT 4305. Federal Tax Accounting I. 3 Semester Credit Hours.
Study current income tax law and regulations with special emphasis on income tax legislation, treasury and court decisions, departmental rulings, income tax problems and returns, social security, and self-employment taxes. Prerequisite(s): ACCT 2301 and junior standing. Credit for both ACCT 4305 and FIN 4305 will not be awarded.

ACCT 4306. Federal Tax Accounting II. 3 Semester Credit Hours.
Continue the study of current income tax law and tax accounting procedures. Learn about preparation of income tax returns for partnerships and corporations. Prerequisite(s): ACCT 4305 or permission of department chair. Credit for both ACCT 4306 and FIN 4306 will not be awarded.

ACCT 4323. Ethics for Accountants. 3 Semester Credit Hours.
Learn auditing and ethical responsibilities for auditors and other accountants in both public and private practice. Study generally accepted auditing standards, the standard audit report, legal responsibilities of accountants, the Code of Professional Conduct for accountants, independence, and objectivity. Special emphasis on case studies involving ethical reasoning, ethical decision making. Prerequisite(s): ACCT 3304.

ACCT 4324. Auditing. 3 Semester Credit Hours.
Learn procedures used by auditors and accounting practitioners to gather and evaluate information and report on their findings. Special emphasis on evaluation of internal control, planning an audit or other engagement, compliance testing, substantive testing, statistical sampling, evaluation of findings, and preparation of reports. Prerequisite(s): ACCT 3304.

ACCT 4335. Financial Statement Analysis. 3 Semester Credit Hours.
Learn the use of financial statements to analyze the position of a firm. Study analysis techniques and limitations imposed by generally accepted accounting principles. Prerequisite(s): ACCT 3303.
ACCT 4350. Management Information Systems. 3 Semester Credit Hours. (WI) Study management issues related to business information systems designed to meet the informational needs of the various business subsystems. Special emphasis on the concepts of systems development, security, privacy and ethics associated with information systems. Credit will be awarded for only one of the following courses: ACCT 4350, CIS 4350, or MGMT 4350. Prerequisite(s): COSC 1301 or 3 hours of Advanced CIS or ACCT 3301 or CIS 3301 and junior standing.

ACCT 4357. Accounting Theory. 3 Semester Credit Hours. Study of the generally accepted accounting rules and principles that govern the practical application of accounting methods. Prerequisite(s): ACCT 3303 and ACCT 3304.

ACCT 4388. Accounting Problems. 1-3 Semester Credit Hours. Study of selected problems in accounting. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. May be repeated with permission of department chair. Prerequisite(s): Senior standing and permission of department chair.

ACCT 4389. Special Topics in Accounting. 3 Semester Credit Hours. Study current issues and developments in accounting. Prerequisite(s): Permission of instructor.

ACCT 5090. Comprehensive Examination. 0 Semester Credit Hours. Study and take the accounting examination for Non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis student do not take this examination.

ACCT 5300. Foundations of Accounting. 1 Semester Credit Hour. Learn basic knowledge of accounting necessary to begin the MBA program. Appropriate for students who have not had prior accounting courses, or who need a refresher course, prior to their MBA studies. Study the accounting process, accounting cycle, preparation of the basic financial statements in corporate annual reports, analysis of corporate financial statements using ratio analysis, the study of cost behavior, and cost-volume-profit analysis.

ACCT 5303. Accounting and Management. 3 Semester Credit Hours. Study accounting as related to problems of making business and economic decisions. Learn both financial and managerial accounting. MS-ACC majors may not take this course for credit. Prerequisite(s): Required accounting leveling or permission of instructor.

ACCT 5305. Accounting Theory. 3 Semester Credit Hours. Study the theory of accounting as it has developed in the economy of the United States. Particular emphasis is on concepts, income measurement, and valuation of assets, including valuation and measurement of equities. Application of accounting theory to contemporary problems is analyzed with cases and research papers on selected areas.

ACCT 5310. Advanced Accounting Systems. 3 Semester Credit Hours. Comprehensive study of computerized accounting systems. Study design, implementation, operation, control and audit techniques of accounting information.

ACCT 5315. Business Law for Accountants. 3 Semester Credit Hours. Study current business law topics which concern accountants in governing their practice and working with clients.

ACCT 5320. Corporate Tax. 3 Semester Credit Hours. Analyze formation and capital structures, partial liquidations, S Corporations, accumulated earnings tax, and personal holding companies.

ACCT 5330. Current Topics in Auditing. 3 Semester Credit Hours. Explore current topics in auditing.

ACCT 5335. Estate Planning. 3 Semester Credit Hours. Study federal estate and gift taxation, as well as advanced family tax planning. Explore issues in taxation of decedent's estate and lifetime gifts, and valuation of properties subject to gift and estate taxes.

ACCT 5340. Ethics in Accounting. 3 Semester Credit Hours. Study of ethics as it relates to problems in business and economic decisions. Explore integration of ethical reasoning, objectivity, independence, and other core values important for the development of a professional accountant. Analyze ethical lapses that have occurred in business and the accounting profession, with readings, problems, and cases requiring use of business and accounting data to evaluate the ethical decision process.

ACCT 5345. Financial Statement Analysis. 3 Semester Credit Hours. Learn an analytical approach to the application of finance and accounting principles relevant to the analysis of financial statements.

ACCT 5350. Forensic Accounting. 3 Semester Credit Hours. Learn the complete cycle of investigative auditing. Examine business, through study and evaluation of internal control, and corroborative evidence on the details of account balances. Explore flow-charts, test planning, use of statistical samples, computer controls and management audits. Gain experience through team performance on an extended case audit.

ACCT 5355. International Accounting. 3 Semester Credit Hours. Examine accounting issues unique to multinational enterprises and international business activities.

ACCT 5360. Information Technology Audit. 3 Semester Credit Hours. Learn controls, issues and audit techniques to explore the use of a computers as an auditing tool. Utilize generalized audit software currently used in auditing practices. Particular emphasis on computer fraud, security measures and controls in advanced online, teleprocessing systems.

ACCT 5365. Accounting Research Seminar. 3 Semester Credit Hours. Explore accounting topics in an online environment. Emphasis is on basic accounting research in the areas of accounting theory, accounting practice, and other accounting topics in preparation for research needs encountered in the business environment and on the CPA exam. Stimulate creative initiative in performing accounting tasks and develop basic skills necessary to effectively research accounting and other topics which may be encountered in a business environment.

ACCT 5370. Auditing Seminar. 3 Semester Credit Hours. Analyze current issues and research in auditing. Explore, attestation, and financial disclosures.

ACCT 5375. Tax Research. 3 Semester Credit Hours. Develop the technical and research skills needed to address contemporary tax issues. Study tax issues, formulate research questions and develop the research skills needed to address them. Special emphasis on major tax services, evaluating relevant authorities and communicating findings in a professionally written research memorandum, familiarization of federal tax policies and procedures, and the authorities that govern tax practice.

ACCT 5388. Accounting Problems. 1-3 Semester Credit Hours. Study of selected problems in accounting. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Prerequisite(s): Permission of department chair.
ACCT 5389. Special Topics in Accounting. 3 Semester Credit Hours.
Study selected accounting topics of current importance to business management. May be repeated once for credit when topics vary.

ACCT 5395. Current Topics in Accounting. 3 Semester Credit Hours.
Explore selected topics of new or current interest in financial accounting.

Anthropology (ANTH)

ANTH 3300. Cultural Anthropology. 3 Semester Credit Hours.
Explore culture and the different attitudes toward cultural diversity in a postmodern, global community. Special emphasis on prehistory, subsistence, economic anthropology, political anthropology, cultural eras, the rise of state societies, and kinship systems. Learn theories and methods of anthropology, and survey the history of the discipline.

ANTH 3301. Cultural Sensitivity. 3 Semester Credit Hours.
Examines culture and its influence on human life. Explores the basic principles of cultural anthropology that leads to interpretations of different cultures. Exposes the student to the theories, data, and critical thinking skills needed to understand global humanity.

ANTH 3305. Wicca and Neo-Paganism. 3 Semester Credit Hours.
A critical examination of Wicca and Neo-pagan groups in the US. Explores the history of such groups and exposes the student to academic research in this area.

ANTH 3320. Archaeology. 3 Semester Credit Hours.
Study the history of archaeology, its theories, methods, and current techniques in site excavation. Examine archaeological cultural complexity by studying hunter-gatherer and state societies in a worldwide overview, as well as within bioarchaeology, CRM work, and NAGPRA.

ANTH 3321. Archaeological Discoveries. 3 Semester Credit Hours.
Study the historical development of the field of archaeology through investigating the most important archaeological discoveries of the past and present. Critique hoaxes and archaeological myths and learn how archaeologists have dispelled them to develop the science of archaeology.

ANTH 3322. Archaeology of Warfare and Violence. 3 Semester Credit Hours.
Study the complex history of warfare in different time periods and world regions with archaeological record. Explore the development of warfare in preindustrial societies, and review the current state of warfare research in archaeology. Special emphasis on the bioarchaeology of conflict.

ANTH 3340. Biological Anthropology. 3 Semester Credit Hours.
Examine the evolutionary processes acting on human populations, through an anthropological study of human biology. Learn non-human primate anatomy, primate classification and ecology, and explore the primate paleontological record. Special emphasis on human variation and adaptation.

ANTH 3372. Sociolinguistics. 3 Semester Credit Hours.
Study the relationship of language and society as shown in the following areas: language change, language variation and social class, pidgin and creole languages, and language policy and planning. This course is cross-listed with ENGL 3372; only one may be taken for credit.

ANTH 4300. Anthropological Theory. 3 Semester Credit Hours.
Introduces students to anthropological theories in the following sub-disciplines: cultural anthropology, biological anthropology, archaeology, and linguistics.

ANTH 4310. Myth and Ritual. 3 Semester Credit Hours.
Examine the history, beliefs, and practices of small-scale societies based on ethnographic literature. Study religious origins, shamanism, trance and other altered states, healing and bewitching, new religions, and certain treatments of the major religious traditions of Hinduism, Buddhism, Judaism, Christianity, and Islam. Cross-listed with RELS 4310; only one may be taken for credit.

ANTH 4317. Qualitative Methods. 3 Semester Credit Hours.
Introduces methodological approaches corresponding to qualitative research methods, with special emphases on interviewing, observation techniques, ethnographic field-based methods, and content analysis. Students are encouraged to take SOCI 4316 before or in conjunction with this course.

ANTH 4320. Ancient Civilizations of Mesoamerica. 3 Semester Credit Hours.
Explore the major pre-Columbian cultures of Mesoamerica, from Olmec to Aztec periods, with a focus on ancient Maya. Emphasis on archaeological and bioarchaeological prehistory and history of these cultures up to and beyond the point of European contact.

ANTH 4330. Bioarcheology. 3 Semester Credit Hours.
Study archaeology and physical anthropology with the use of evidence gleaned from human skeletal remains. Focuses on the role of the human skeleton in reconstructing both the biological and cultural past of the human species.

ANTH 4340. Human Osteology. 3 Semester Credit Hours.
Examine the human skeleton as the foundation for biological anthropological study. Learn concepts and methods used by anthropologists to identify, describe, and analyze human skeletal remains from forensic and archaeological contexts.

ANTH 4351. Forensic Anthropology. 3 Semester Credit Hours.
Apply the science of physical anthropology to the legal investigative process. Learn to identify human remains, as well as age, sex, ancestry, and stature of those remains, and how these are used to help establish positive identification. Special emphasis on skeletal trauma, and pathology to determine cause and manner of death. Cross-listed with CRIJ 4351; only one may be taken for credit.

ANTH 4389. Special Topics in Anthropology. 3 Semester Credit Hours.
Investigate selected topics within the field of Anthropology. May be repeated when topic varies.

ANTH 5310. Anthropology of Religion. 3 Semester Credit Hours.
Examine and critique anthropological theories, ethnographies, and literature pertaining to the study of religious phenomena, including myth and ritual, altered states, healing, bewitching, and religious practitioners. This course is cross-listed with RELS 5310 and only one may be taken for credit.

ANTH 5351. Forensic Anthropology. 3 Semester Credit Hours.
Gain a comprehensive understanding of the field of forensic anthropology. Review a diverse range of topics including age, sex, ancestry, stature, and trauma, and understand how these are used in identification and determining cause and manner of death, as well as learn to evaluate and critically analyze scientific publications within the discipline of forensic anthropology.

ANTH 5389. Special Topics in Anthropology. 3 Semester Credit Hours.
Investigate selected topics within the field of anthropology. Students may enroll for additional credit hours when topics vary.
**Aviation Science (AVSC)**

**AVSC 3301. Air Carrier Operations. 3 Semester Credit Hours.**
Explore Federal Aviation Regulations relating to various specialized facets of the aviation industry, including airline operations, aircraft certification, air-worthiness standards and airport operations. Prerequisite(s): Commercial Pilot Certificate or permission of the department Chair.

**AVSC 3302. Aviation Techniques of Instruction. 3 Semester Credit Hours.**
Examine the fundamentals of teaching and learning in an aviation oriented environment. Develop the techniques of instruction and the analysis of flight maneuvers, and demonstrate the theory of flight. Correlate Federal Aviation Regulations relating to the application of their flight instructor rating. Prerequisite(s): Commercial Pilot Certificate or permission of instructor.

**AVSC 3303. Air Traffic Control. 3 Semester Credit Hours.**
Study FAA’s procedures for separating aircraft in the National Air Space, including the airport environment and enroute flight. Prerequisite(s): Acceptance into Professional Pilot program and Commercial Pilot Certificate or instructor approval.

**AVSC 3304. Airport Management. 3 Semester Credit Hours.**
Examine requirements for developing a public airport to include local and state governmental agencies. Explore Federal aid and regulations, and the management required for the overall airport operations. Analyze tenant operators, leases, property development for non-aviation use, user taxation for airport operations, planning and policies, organization and administration, maintenance, safety and airport fuels and regulations. Prerequisite(s): Acceptance into Aviation Management or Professional Pilot program.

**AVSC 3307. Aviation History. 3 Semester Credit Hours.**
(WI) Study the people and events from ancient times through the present that have influenced modern aviation internationally. Examine historical evidence and recorded documents to understand the role aviation has played in modern events. Prerequisite(s): Acceptance into Aviation Management or Professional Pilot program.

**AVSC 3308. Aviation History II. 3 Semester Credit Hours.**
Study the people and events from 1939 to the present that have influenced modern aviation internationally. Examine historical evidence and recorded documents to understand the role aviation has played in world events. Prerequisite(s): Junior classification.

**AVSC 3321. Airline Management. 3 Semester Credit Hours.**
Discover the behind-the-scenes activities involved in the business of airline operations. Prerequisite(s): Acceptance into Aviation Management program.

**AVSC 3333. Airports and Environmental Impact. 3 Semester Credit Hours.**
Review the FAA advisory circular topics such as sustainability, solar alternative energy, environmental hazards and prevention of mishaps with an emphasis on the importance of environmental concerns in modern airports and the impact on the surrounding communities and ecosystems. Prerequisite(s): Acceptance into Aviation Management program.

**AVSC 4301. Aviation Law. 3 Semester Credit Hours.**
Explore the distinctive body of statutes, treaties, regulation and case law related to general aviation. Examine specialized rules and laws that have been developed due to the distinctive nature of the airplane as a mode of transportation. Prerequisite(s): Acceptance into Aviation Management or Professional Pilot program.

**AVSC 4302. Advanced Aircraft Systems. 3 Semester Credit Hours.**
Study aerodynamics, federal aviation regulations, weight, balance, and turbine systems, and their relationship with aircraft systems. Apply and operate advanced aircraft systems used by commercial pilots in air carrier operations. Prerequisite(s): Acceptance into Aviation Management or Professional Pilot program.

**AVSC 4308. Aviation Safety. 3 Semester Credit Hours.**
Analyze effective procedures and techniques in the development and supervision of an Aviation Safety program. Study aircraft accident prevention, and the use of statistics in aviation safety. Special emphasis on safety measures and education media materials. Prerequisite(s): Acceptance into Aviation Management or Professional Pilot program.

**AVSC 4309. Aviation Security. 3 Semester Credit Hours.**
(WI) Consider the use of situational awareness, teamwork, and effective communication to recognize and thwart security threats in the aviation environment. Analyze the use of effective procedures and policies to recognize and prevent the intentional act of humans to cause harm or disruption through aviation.

**AVSC 4321. Certification of Airports. 3 Semester Credit Hours.**
Discuss the requirements and procedures in seeking government approvals for airport certification as it applies to general aviation and air carrier operations. Students are advised to take a writing intensive course prior to enrolling. Prerequisite(s): AVSC 3321 and acceptance into Aviation Management program.

**AVSC 4333. General Aviation and Corporate Business Aviation. 3 Semester Credit Hours.**
Study the business skills and knowledge needed to operate a small aviation business. Gain an understanding of the operational managerial aspects of general aviation and corporate business aviation. Prerequisite(s): AVSC 3304, AVSC 3321 and acceptance into Aviation Management program.

**AVSC 4344. Historical Application of Aircraft Design. 3 Semester Credit Hours.**
Study the evolution, concepts, and design aspects used in aircraft development. Construct and evaluate scale models of historical aircraft. Special emphasis on aerodynamic efficiency and aircraft manufacturing.

**AVSC 4350. Aviation Seminar. 3 Semester Credit Hours.**
Explore selected topics in aviation. May be repeated for credit when topics vary. Prerequisite(s): Permission of department chair.

**AVSC 4384. Aviation Internship. 3 Semester Credit Hours.**
Experience supervised Aviation Management in a fixed base operations, regional/major airline operations or municipal airport management operations setting. Analyze management problems, develop resolution techniques, and understand customer service as an important phase of the management process. Prerequisite(s): 12 hours of upper-level aviation courses, AVSC 3304 and permission of instructor. Field assignment fee $75.

**AVSC 4388. Aviation Problems. 1-3 Semester Credit Hours.**
Explore selected topics in aviation. May be repeated with permission of the department chair. Prerequisite(s): Permission of department chair.

**AVSC 4395. Capstone – Professional Pilot (Crew Resource Management). 3 Semester Credit Hours.**
Practice the knowledge, skills, attitudes, and abilities attained in the program in demonstrating and utilizing Crew Resource Management (CRM), a teamwork approach to situational awareness and management. Prerequisite(s): Senior standing and acceptance in Professional Pilot program.
AVSC 4396. Capstone – Aviation Management (Emergency Preparedness). 3 Semester Credit Hours.
Practice the knowledge, skills, attitudes, and abilities attained in the program in demonstrating emergency preparedness in simulated emergency scenarios. Prerequisite(s): Senior standing and acceptance in Aviation Management program.

Biology (BIOL)

BIOL 3315. Advanced Physiology. 3 Semester Credit Hours.
Study human physiology at the biochemical, cellular, tissue, and organ level. Designed for upper division science and nursing majors. Prerequisite(s): BIOL 1406.

BIOL 3318. Animal Physiology. 3 Semester Credit Hours.
Explore mammalian physiology as well as other selected vertebrate taxa. Special emphasis on organ-system physiology, and cellular and molecular mechanisms in order to present a current view of physiological principles. Highlights the nervous, muscular, cardiovascular, respiratory, renal, digestive, and endocrine physiology. Prerequisite(s): BIOL 1407.

BIOL 3380. Research Methods. 3 Semester Credit Hours.
(WI) Explore the general principles and procedures of scientific research with an emphasis on the use of scientific literature and the methods of research. Prerequisite(s): Junior standing.

BIOL 3400. Introduction to Biology. 4 Semester Credit Hours.
Gain an understanding of basic principles and unifying concepts in biology. Topics include scientific inquiry, basic biochemistry, cell structure and function, genetics, evolution, diversity of life, and anatomy and physiology. For non-biology majors. Laboratory sessions will provide experience with selected biological principles and practices.

BIOL 3401. Ecology. 4 Semester Credit Hours.
(WI) Explore interactions at the organismal, population, and community level, and apply ecological theory to current environmental problems. Emphasis in the laboratory and field exercises is placed on the ecological methodology and the application of these methods. Students are required to use various statistical methods to analyze and interpret the data. Prerequisite(s): BIOL 1407. Corequisite(s): MATH 3350.

BIOL 3420. Entomology. 4 Semester Credit Hours.
Explore the largest and most diverse group of animals on our planet. Examining the physiology, morphology, life histories, diversity, ecology, and evolution of insects. The laboratory focuses on the anatomy and classification of insects. Insect collection is required. Prerequisite(s): BIOL 1407.

BIOL 3430. Botany. 4 Semester Credit Hours.
Analyze the internal organization of plants, particularly angiosperms, with an emphasis on understanding anatomy from a structure-function standpoint. Prerequisite(s): BIOL 1407.

BIOL 3440. Invertebrate Zoology. 4 Semester Credit Hours.
Learn the biology, ecology, taxonomy and comparative anatomy of animals within the invertebrate phylum. Analyze live and preserved specimens in the field and laboratory. Prerequisite(s): BIOL 1407.

BIOL 3445. Comparative Vertebrate Zoology. 4 Semester Credit Hours.
Learn the biology, ecology, taxonomy, and comparative anatomy of animals within the vertebrate phylum. Analyze live and preserved specimens in the field and laboratory. Prerequisite(s): BIOL 1407.

BIOL 3452. Principles of Genetics. 4 Semester Credit Hours.
Explore the mechanisms of inheritance, from bacteria to humans, as well as mutations and phenotypes, Mendelian genetics, population genetics and evolution, and complex inheritance. Prerequisite(s) BIOL 1407.

BIOL 3471. Microbiology. 4 Semester Credit Hours.
Introduction to modern microbiology with emphasis on prokaryotes; includes microbial cell structure, function, and physiology; genetics, evolution, and taxonomy; bacteriophages and viruses; pathogenesis and immunity; and ecology and biotechnology. The laboratory will focus on microbial growth and bacterial identification. Three hours of lecture and three hours of laboratory. Prerequisite(s): BIOL 1407.

BIOL 3401. Conservation Biology. 3 Semester Credit Hours.
Examine conservation of biological diversity at gene, population, species, ecosystem, and global levels. Provides an overview of conservation biology including the causes and consequences of biodiversity loss, conservation approaches and strategies, and the ecological and evolutionary theory underlying these approaches. Prerequisite(s): BIOL 3401.

BIOL 4302. Restoration Ecology. 3 Semester Credit Hours.
Explore the fundamental principles of ecological restoration. Survey the discipline, and the scientific, ethical, and philosophical underpinnings that guide ecological restoration. Principles of ecosystem ecology are introduced to provide an understanding of ecosystem processes across landscapes and within specific restoration sites. Prerequisite(s): BIOL 3401.

BIOL 4346. Animal Behavior. 3 Semester Credit Hours.
Study vertebrate and invertebrate animal behavior. Basic topics include animal learning, mechanisms of behavior, foraging, competition, defense, aggression, sensory systems, communication, mating systems and parental care behavior. Prerequisite(s): BIOL 1407.

BIOL 4372. Virology. 3 Semester Credit Hours.
Study viruses with an emphasis on biology, diversity, and medical importance. Focusing primarily on human and animal viruses, and the molecular and clinical aspects of virology. Prerequisite(s): BIOL 4470.

BIOL 4373. Immunology. 3 Semester Credit Hours.
Explore the basic biological concepts of immunology. Study immunology from the viewpoints of developmental biology, molecular biology, genetics, biochemistry, microbiology, anatomy, and medicine. Prerequisite(s): BIOL 4470.

BIOL 4380. Evolution. 3 Semester Credit Hours.
Examine evolutionary theory, including the historical development of components of evolutionary theory, population level microevolution, the fossil record, and macroevolution. Prerequisite(s): BIOL 1407 and BIOL 3452.

BIOL 4389. Special Topics in Biology. 1-3 Semester Credit Hours.
Examine selected topics in biology. Course may be repeated for credit when topics vary. Prerequisite(s): Permission of department chair.

BIOL 4395. Biology Capstone. 3 Semester Credit Hours.
(WI) Capstone seminar focusing on life science research conducted by seniors and faculty. Prerequisite(s): BIOL 3380 and senior standing.

BIOL 4451. Bioinformatics. 4 Semester Credit Hours.
Study how genomic sequence and its variations affect phenotypes. Focuses on the information available from DNA sequencing projects, ranging from the sequences of individual genes to those of entire genomes. Learn analytical techniques that can be used to evaluate sequence data, and examples of their biological significance. Prerequisite(s): BIOL 4470 and BIOL 4471.
BIOL 4470. Cell Biology. 4 Semester Credit Hours.
Study the cell at the structural, functional, and molecular levels. Emphasis is placed on the molecular mechanisms of cell metabolism, growth, division, and communication. The laboratory focuses on cell structure and laboratory techniques. Prerequisite(s): BIOL 1407 and BIOL 3452.

BIOL 4471. Molecular Biology. 4 Semester Credit Hours.
Study modern molecular biology with an emphasis on gene structure and activity, and the biochemistry related to understanding the functions of the gene. Prerequisite(s): BIOL 1407 and BIOL 4470.

BIOL 4475. Proteomics. 4 Semester Credit Hours.
Study the theory and practice of current techniques of protein analysis including separation, quantification, sequencing, and identification. Current research advances and case studies are also examined. Prerequisite(s): BIOL 4471.

Business (BUSI)

BUSI 3301. Business Communications and Research. 3 Semester Credit Hours.
(WI) Study and demonstrate the different types of letters and reports utilized in the modern business environment. Basic business research and APA citation skills will also be an essential component of the course, as well as presentation fundamentals. Completion of this course is recommended in the first semester of enrollment as it is a prerequisite for most business courses.

BUSI 3311. Business Statistics. 3 Semester Credit Hours.
Study descriptive statistics and the foundations of inferential statistics, including statistical methods of sampling, classifying, analyzing, and presenting numerical data. Learn frequency and sampling distributions, averages, dispersion, hypothesis testing and analyzing up to two populations and population proportions. Additionally, students will be introduced to ANOVA, correlations, regression and Chi-Square analyses. Prerequisite(s): MATH 1324 or higher.

BUSI 3332. Legal Environment of Business. 3 Semester Credit Hours.
The study of principles of law relating to the development and sources of law, dispute resolution, ethics, torts, intellectual property, criminal law, contracts, agency, business entity formation, and international law issues in the 21st century.

BUSI 3344. Introduction to the Global Business Environment. 3 Semester Credit Hours.
Broad coverage of key concepts and issues in the modern global business environment. Emphasis will be placed on political, financial, cultural and regulatory effects on the operations of businesses in the global environment.

BUSI 4301. Business Ethics and Corporate Social Responsibility. 3 Semester Credit Hours.
Examine contemporary organizational ethical issues and challenges. Analyze stakeholder management and sustainability, with emphasis on the manager’s corporate social responsibilities to a wide variety of stakeholders. Study ethical dilemmas, decision-making frameworks and approaches to corporate social responsibility. Service Learning in the community is a required component. Prerequisites: BUSI 3301 and MGMT 3301.

BUSI 4320. Fundamentals of Real Estate. 3 Semester Credit Hours.
Explore the nature of real estate and how ownership is held. Examine legal descriptions, encumbrances and liens, title transfer, title records. Analyze concepts of home ownership, buying, selling and financial real estate, closing the real estate transaction, and real estate taxes, and other issues in liens, leases and landlord tenant laws.

BUSI 4333. Business Law II. 3 Semester Credit Hours.
Study principles of law concerning agency, employment, partnerships, corporations, bankruptcy, secured transactions, creditor/debtor rights, insurance, real and personal property. Examine laws impacting the regulatory environment of business such as consumer protection, environment, anti-trust, and securities law. Prerequisite(s): Junior standing.

BUSI 4334. Employment Law. 3 Semester Credit Hours.
Study laws relating to employment. Explore employer-employee relationships, regulation of discriminatory practices in employment (Title VII, the 1964 Civil Rights Act, and other statutes), regulation of the employment environment, and testing and evaluation of employee job performance. Prerequisite(s): BUSI 3332 or MGMT 3302.

BUSI 4345. International Business Law. 3 Semester Credit Hours.
Study international commercial business and the legal environment. Learn traditional international concepts of treaties, sovereignty, public and private laws, customs laws, licensing, franchising, environmental and employment law. Special emphasis on contracts for international sale of goods (CISG), GATT and WTO Treaties, NAFTA, regional trade areas.

BUSI 4354. Global Business Practices. 3 Semester Credit Hours.
Study basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities related to the visited foreign country. A required study abroad at the student’s expense is required. Student may complete a maximum of six hours of COBA sponsored study abroad toward degree completion. Prerequisite(s): Junior or senior standing. BUSI 4354, MGMT 3301, or MKTG 4356 may not be taken concurrently. Field assignment fee of $75.

BUSI 4359. Business Strategy. 3 Semester Credit Hours.
(WI) Concepts and principles of accounting, economics, finance, management, marketing, and quantitative methods relevant to developing successful strategy. Examine problem solving and business decision making. Appropriate for senior business majors during their last semester. Prerequisite(s): ACCT 2301, ACCT 2302, ECON 2301, FIN 3301, BUSI 3311, MGMT 3301 and MKTG 3301. A materials fee of $45 is required for needed course materials.

BUSI 4361. General Business Seminar. 3 Semester Credit Hours.
Study selected topics in dealing with problems or unique needs of business. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. May be repeated for credit as topics vary. Prerequisite(s): Permission to enroll is required.

BUSI 4363. Small Business Consulting. 3 Semester Credit Hours.
Study selected problems in diagnosing and analyzing problems of small business clients, and prepare formal written reports and recommendations for client implementation. Engage in independent research, reading and discussions under the personal direction of the instructor. Topics may vary according to student need. Prerequisite(s): Senior standing and permission of department chair.
BUSI 4388. Business Problems. 1-3 Semester Credit Hours.
Study selected problems in business. Engage in independent research, reading and discussions under the personal direction of the instructor. Topics may vary according to student need. May be repeated with permission of the department chair. Prerequisite(s): Senior standing and permission of department chair.

BUSI 5090. Business Comprehensive Examination. 0 Semester Credit Hours.
Study and take the business examination for non-thesis students. Register for the comprehensive examination during final semester of graduate coursework concurrently with BUSI 5359, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

BUSI 5310. Business Research Methods. 3 Semester Credit Hours.
Study nature, scope, and significance of business research and research methodology. Develop primary research methods with applications to specific problems. Learn the place of quantitative methods in research and individual investigation, and report on current problems in a selected field of interest. Prerequisite(s): BUSI 5300 or approved leveling in statistics.

BUSI 5312. Managerial Statistics. 3 Semester Credit Hours.
Explore applied descriptive and inferential statistical calculations. Examine statistics as a decision-making tool under uncertainty, probability, confidence intervals, hypothesis testing, ANOVA, correlation, regression, and statistical process control in the context of business and organization. Prerequisite(s): BUSI 5300 or approved leveling in statistics.

BUSI 5315. International Business Law. 3 Semester Credit Hours.
Study international commercial business and the legal environment in which it operates. Explore traditional international concepts of treaties, sovereignty, public and private laws, customs laws, licensing, franchising, environmental, and employment law. Special emphasis on contracts for international sale of goods (CISG), GATT and WTO Treaties, NAFTA, regional trade areas.

BUSI 5354. Global Business Practices. 3 Semester Credit Hours.
Study basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities in the visited foreign country. A study abroad at the student’s expense is required. Graduate students will be required to complete an extensive research project in addition to other course requirements. Student may complete a maximum of six hours of COBA sponsored study abroad toward degree completion. Prerequisite(s): Admission into a COBA graduate program and permission of instructor. Field assignment fee of $75.

BUSI 5359. Business Strategy Seminar. 3 Semester Credit Hours.
Develop an integrated view of the business functions addressed in the MBA core curriculum. Apply case analysis methodology for evaluating complex business situations, developing strategic alternatives, and recommending effective solutions. Prerequisite(s): ACCT 5303, FIN 5307, BUSI 5310, MGMT 5301 and MKTG 5308. A student may take one of these concurrently with the permission of the instructor. A materials fee of $45 is required for needed course materials.

BUSI 5388. Business Problems. 1-6 Semester Credit Hours.
Study selected problems in business, and become acquainted with current research being conducted within the specific area of interest. Participate in directed reading of sources selected in concert by the student and professor. Engage in independent research, reading and discussions under the personal direction of the instructor. Topics may vary according to student need. Prerequisite(s): Permission of department chair.

Chemistry (CHEM)

CHEM 3415. Analytical Chemistry. 4 Semester Credit Hours.
Explore the principles and applications of gravimetric and volumetric analysis. Learn the theory for selecting analytical methods and separation techniques—precipitations, extraction and complexation, sources of error, data handling, and error analysis. Prerequisite(s): CHEM 2425 or equivalent.

CHEM 4415. Instrumental Analysis. 4 Semester Credit Hours.
Examine chemical analysis utilizing electronic instrumentation. Learn spectroscopy techniques such as UV/VIS, molecular fluorescence, infrared, Rama, Atomic fluorescence, atomic absorption, atomic fluorescence, NMR and mass spectrometry. Explore chromatographic and electrochemical techniques, such as ion selective electrodes, polarography, coulometry, amperometry, and conductance. Prerequisite(s): CHEM 3415 or equivalent.

CHEM 4430. Biochemistry I. 4 Semester Credit Hours.
Study molecular components of the cell such as amino acids, proteins, enzymes, sugars, lipids, lipoproteins, nucleotides, vitamins and coenzymes. Learn energy yielding processes such as the ATP cycle, glycolysis, tricarboxylic acid cycle, the phosphogluconate pathway, redox enzymes and electron transport, oxidative phosphorylation, fatty acid metabolism, amino acid degradation and photosynthesis. First course in a two semester sequence. Prerequisite(s): CHEM 2425 or equivalent.

CHEM 4431. Biochemistry II. 4 Semester Credit Hours.
Study the synthesis of carbohydrates, lipids, amino acids and nucleotides, the conversion of biochemical energy into motility, membrane transport mechanisms, hormones and the regulation of DNA, protein synthesis, genes and their regulation, and systemic morphogenesis. Second course in a two semester sequence. Prerequisite(s): CHEM 4430 or equivalent.

CHEM 4451. Bioinformatics. 4 Semester Credit Hours.
An introduction for understanding how genomic sequence and its variations affect phenotypes. Will focus on the information available from DNA sequencing projects, ranging from the sequences of individual genes, to those of entire genomes. Students will learn analytical techniques that can be used to evaluate sequence data, and examples of the biological significance of such analyses. Prerequisite(s): BIOL 4470 and BIOL 4471.

Communications (COMM)

COMM 3301. Business & Prof Speaking. 3 Semester Credit Hours.
A study of verbal and nonverbal communication as it functions in business and professional organizations. Special emphasis will be given to developing oral language proficiency, interviewing, small decision-making groups, oral reporting, and organizational communication.
COMM 3303. Debate. 3 Semester Credit Hours.
An introduction to the principles of argumentation and debate. Subject material will include research, evidence, reasoning, case construction, refutation, and delivery. Classroom debating will provide students with opportunities to observe and participate in competitive debating. This course is particularly applicable to those anticipating study in prelaw. Prerequisite(s): SPCH 1311, SPCH 1315 or permission of department chair.

COMM 3304. Interpersonal Communication. 3 Semester Credit Hours.
A course designed to improve individual communication skills relevant to human relationships. The development and maintenance of interpersonal (one-to-one) relations are examined, with special emphasis on identifying and correcting communication breakdown. A portion of the course will be devoted to exercises designed to improve interpersonal skills. Prerequisite(s): SPCH 1311 or COMM 3301 or permission of department chair.

COMM 4304. Organizational Communication. 3 Semester Credit Hours.
An advanced study of communication as it takes place in business and industrial settings. Special attention will be given to managerial communication, communicator style, channels and networks, and organizational communication consulting. Prerequisite(s): COMM 3301.

COMM 4306. Group Process/Decision Making. 3 Semester Credit Hours.
A study of small group theory and process. Special attention will be given to leadership, organization, group analysis, and interaction. Students will observe and participate in small group discussions on contemporary issues. Prerequisite(s): SPCH 1311 or COMM 3301 or COMM 3304 or permission of department chair.

COMM 4389. Special Topics in Communication. 3 Semester Credit Hours.
This course provides students the opportunity to examine a topic as it relates to the interests and methodologies of communication. May be repeated when the topic varies.

COMM 5321. Essentials of Mass Media. 3 Semester Credit Hours.
This is a study of the ascension to power of the mass media and the current devices and practices used in the creation of a culture of online, and other media-based connections. Areas of study focus on religion & denominations, individualism, intellectualism, the Internet, races and cultures, political groups, ethical practices, science, education, the culture and economy of urban areas, etc.

COMM 5322. Politics and Mass Media. 3 Semester Credit Hours.
This course is a study of mass media and their creation of a culture of online and other media-based connections to and with politics, and includes specific groups focused on religion & denominations, individualism, intellectualism, the Internet, race and culture, politics, science, education, urban areas, etc.

COMM 5323. Social Media as Mass Media. 3 Semester Credit Hours.
This course offers a study of mass media and the creation of online social cultures, communication networks, and of the “other” - other groups formed from religions & denominations, or based on individualism, intellectualism, the Internet, races and cultures, political groups, foods, drugs, science, education, social interaction, urban areas, etc.

COMM 5324. Religion and Mass Media. 3 Semester Credit Hours.
This course offers a study of the media and its connections to the media's creation of a culture of online and other mass media-based connections to and with religion, which includes a variety of religions and denominations, individualism, intellectualism, the Internet, other races and cultures, political groups, science, education, the socioeconomics of urban areas, etc.

COMM 5325. Fear Culture and Mass Media. 3 Semester Credit Hours.
This course offers a study of mass media and its connections to the creation of a culture of fear, of the other - other religions & denominations, individualism, intellectualism, the Internet, other races and cultures, political groups, foods, drugs, science, education, urban areas, etc.

COMM 5329. Topics in Mass Media. 3 Semester Credit Hours.
This course offers an in-depth study of particular issues within media studies. Topics will vary from year to year. A more specific course description will introduce the particular focus of a class. This course may be repeated when the topic changes.

Computer Information Systems (CIS)

CIS 3300. Computer Technology and Impact. 3 Semester Credit Hours.
Explores computer technology with special attention to its impact on home, work, and school. Many topics are presented: hardware and software fundamentals, essential applications, telecommunications, internet, artificial intelligence, programming, and the future of these technologies. Students work with word processing, spreadsheet, database, and presentation software; other applications; and a programming language. No prior computer experience necessary.

CIS 3301. Business Analysis with Spreadsheets. 3 Semester Credit Hours.
Examine theory and application of microcomputer technology applied in accounting, finance, management, and other business disciplines. Develop creative initiative, and study basic analytical skills in performing common business tasks. Credit for both CIS 3301 and ACCT 3301 will not be awarded.

CIS 3302. Introduction to Business Analytics. 3 Semester Credit Hours.
Examine theory and application of business analytics applied in accounting, finance, marketing, management, and other business disciplines. Develop basic analytical skills to gain insights and make better decisions. Special emphasis on descriptive statistics, data visualization, descriptive data mining, linear regression, forecasting, optimization models, spreadsheet models, Monte Carlo simulation, and decision analysis.

CIS 3303. Programming Logic and Design. 3 Semester Credit Hours.
This course introduces computer programming and problem solving in a structured program logic environment. Study the logic of decision-making, nested looping, multidimensional arrays, implementation of the structure theorem and Boolean algebra. Utilize structured flowcharts, structured pseudocode, hierarchy charts and decision tables, in order to document logical problem solutions. The course focuses on business problem solving and does not count as a programming language. No prior programming experience is necessary.

CIS 3304. Topics in Computer Information Systems. 3 Semester Credit Hours.
Examine selected topics in programming languages, programming techniques, or job control languages. May be repeated once for credit as topics vary. Prerequisite(s): Varies with topic.

CIS 3305. Operating Systems Theory and Practice. 3 Semester Credit Hours.
Study the history, development, and principles of computer operating systems and their variants in mainframe, minicomputer, server, and microcomputer application environments. Explore preferred operating systems representing various hardware environments. Special emphasis on related software issues, programming capabilities, and job control languages. Prerequisite(s): CIS 3303 or permission of department chair.
CIS 3306. Data Visualization. 3 Semester Credit Hours.
Data visualization makes it easier to understand the data. The goal
of this course is to introduce students to data visualization including
both the principles and techniques. Students will learn the value
of visualization, specific techniques in information visualization and
scientific visualization, and how to understand how to best leverage
visualization methods.

CIS 3307. Application Project with Laboratory. 3 Semester Credit Hours.
Develop and document a software product using a formal software
development process. Projects of value are actively sought from local
businesses, governments, or nonprofit organizations when possible. May
be repeated for credit when topics change. Prerequisite(s): Varies with
topic.

CIS 3312. Technical Support Management and Operations. 3 Semester
Credit Hours.
Study the scope, significance, job skills, training, software availability,
and support problems of technical support within the technology
industry. Develop technical support skills, with an emphasis on the use of
resources, troubleshooting, and customer relations.

CIS 3315. Web Site Development and Design. 3 Semester Credit Hours.
This course introduces students to basic web design using HTML and
CSS. The course does not require any prior knowledge of HTML or web
design. Students learn how to plan and design effective web pages;
implement web pages by writing HTML and CSS code; enhance web
pages with the use of page layout techniques, text formatting, graphics,
images, and multimedia; and produce a functional, multi-page website.

CIS 3330. C++ Programming. 3 Semester Credit Hours.
Study structured C++ programming using microcomputers. Special
emphasis on syntax, operators, functions, standard input/output, arrays,
pointers, and structures in C++ programming. Prerequisite(s): COSC1309
OR COSC 1336 or CIS 3303 or concurrent enrollment or permission of
department chair.

CIS 3331. Visual Basic Programming. 3 Semester Credit Hours.
Study visual application development using Visual Basic and the native
integrated development environment. Examine logic, working with forms,
sequential and direct file access, and scope and visibility rules. Analyze
problems within Visual Basic and develop programming solutions. Prerequisite(s): COSC1309
OR COSC 1336 or CIS 3303 or concurrent enrollment or permission of
department chair.

CIS 3332. Java Programming. 3 Semester Credit Hours.
Study applications development using Java. Examine identifiers and
reserved words, objects and primitive data, program statements, arrays
and vectors, exceptions and I/O streams, and graphical user interfaces.
Analyze problems within Java and develop programming solutions. Prerequisite(s): COSC1309
OR COSC 1336 or CIS 3303 or concurrent enrollment or permission of
department chair.

CIS 3340. Advanced C++ Programming. 3 Semester Credit Hours.
Study C++ programming language. Examine advanced features of C++
such as classes, friends, abstraction, operator overloading, inheritance,
polymorphism, templates, and object oriented programming techniques.
Analyze problems within C++ and develop programming solutions. Prerequisite(s): CIS 3330 or permission of
department chair.

CIS 3341. Advanced Visual Basic Programming. 3 Semester Credit Hours.
Study Visual Basic programming techniques, including declaration and
manipulation of arrays, accessing database files, and advanced data
handling techniques. Analyze advanced problems in Visual Basic and
develop programming solutions. Prerequisite(s): CIS 3331 or permission of
department chair.

CIS 3342. Advanced Java Programming. 3 Semester Credit Hours.
Study Java programming language. Examine advanced Java capabilities,
including class features, error handling, security techniques, Java
streams, JavaBeans, database connectivity, Java servlets, Java
Server pages, and advanced object-oriented programming techniques.
Analyze advanced Java problems and develop programming solutions. Prerequisite(s): CIS 3332 or permission of department chair.

CIS 3343. C# Programming for Windows and the Web. 3 Semester Credit
Hours.
Use C# programming language to create Windows applications in the
Internet and intra-network environment. Explore object-oriented design,
client-server interaction, event-driven programming, graphical user
interfaces, distributed data, and distributed applications. Prerequisite(s):
CIS 3330 or CIS 3331 or CIS 3332 or permission of the department chair.

CIS 3345. Topics in Personal Computer Software and Application. 3
Semester Credit Hours.
Examine selected personal computer applications and software
packages. Explore the operation and usefulness of commonly available
personal computing software solutions. May be repeated once for credit
as topics vary. Prerequisite(s): Varies with topic.

CIS 3346. Personal Computer Technology. 3 Semester Credit Hours.
Examine the technology and hardware operations in microcomputers,
their peripherals, and operating system software. Special emphasis on
hardware configuration and selection, installation and test procedures,
and routine maintenance.

CIS 3347. Data Communications and Infrastructure. 3 Semester Credit
Hours.
A study of telecommunications architecture, industry standards and
communications protocols, the placement of networking devices and
components, transmission media selection, logical and physical
topologies, voice and data transmission, and structured cabling for
local area networks (LANs) and wide area networks (WANs). Application
exercises will include evaluating alternatives available in hardware,
software, and transmission facilities, design integration, selection
and implementation of communications and networking solutions.
In addition, students will explore the current and future impact and
directions of these technologies. Students will complete an architecture
design project will include required components and address services as
specified in an industry specific Request for Proposal (RFP).

CIS 3348. Networking Architecture and Design. 3 Semester Credit Hours.
Examine industry standards and communications protocols in
networking. Learn placement of networking devices, transmission
media selection, topologies, data transmission, and structured cabling
for LANs and WANs. Develop network designs as specified in an
industry specific Request for Proposal (RFP). Prepare and present a
design proposal in response to an RFP, and installation, configuration,
testing and troubleshooting of WAN/LAN wiring interface technologies. Prerequisite(s): CIS 3347 or permission of department chair.

CIS 3351. Data Structures. 3 Semester Credit Hours.
Study theory and applications of commonly used computer data
structures, files, file organization and access methods, databases, and
other storage and retrieval methods. Prerequisite(s): CIS 3340 or CIS
3341 or CIS 3342 or CIS 3343 or concurrent enrollment or permission of
department chair.
CIS 3360. Ethics in Computing. 3 Semester Credit Hours.
(WI) Examine personal and contemporary organizational ethical issues and challenges in the design, development and the use of computing technologies in a global environment. Special emphasis on the philosophical basis for computer ethics, reliability and safety of computer systems, protecting software and other intellectual property, computer crime and legal issues, and professional codes of ethics (AIS, ACM, IEEE etc.).

CIS 3361. Introduction to Computer Forensics. 3 Semester Credit Hours.
The course focuses on clear and authoritative instructions about the field of computer forensics as it applies to the investigative process; from the collection of digital evidence to the presentation of Computer Forensic Examination findings in a court of law. Upon successful completion of the course, students will have a basic understanding of the computer forensic process, the scientific procedure involved in accounting, law enforcement, and computer sciences. Topics also include the science of computer forensics and how it relates to and is utilized within the judicial system of the United States.

CIS 3365. System Analysis and Design. 3 Semester Credit Hours.
Examine systematic analysis, design, and implementation of software systems with special emphasis on the processes and skills used in the first four stages of the System Development Life Cycle. Analyze traditional and current methodologies in design, including computer aided analysis and design tools. Prerequisite(s): CIS 3330 or CIS 3331 or CIS 3332, or permission of department chair.

CIS 3387. Cooperative Education. 3 Semester Credit Hours.
Develop and apply relevant CIS concepts in a work environment. Work in an approved professional CIS setting for approximately 300 hours before credit will be granted. To remain in the program, the student must remain in good standing with the university and employer. May be repeated once for credit. Prerequisite(s): Permission of co-op coordinator and department chair, and formal application to the program. Field experience fee $75.

CIS 3389. Special Topics in Computer Information Systems. 3 Semester Credit Hours.
Examine selected issues, products, and technology current to computer information systems. This course may be repeated once for credit. Prerequisite(s): Varies with the topic or Permission of department chair.

CIS 4301. Database Theory and Practices. 3 Semester Credit Hours.
Examine database concepts and structures, and understand file and data management principles underlying database construction. Learn fundamental types of database models, with emphasis on relational databases and major non-relational forms. Develop skills in analysis, design, development, and optimization of working database applications on a variety of problems. Prerequisite(s): 12 hours of CIS courses or permission of department chair.

CIS 4302. Advanced Business Analytics. 3 Semester Credit Hours.
Follow the traditional descriptive/predictive/prescriptive framework to analyze large sets of data and explain the theory of formulating statistical models. Special emphasis on cluster analysis, Naïve Bayes, Optimization Modeling, simple and multiple linear regression, and ensemble modeling. Prerequisite(s): CIS 3302.

CIS 4303. Data Mining. 3 Semester Credit Hours.
Discover basic concepts, tasks, methods, and techniques in data mining, and analyze data mining problems and their solutions. Develop an understanding of the data mining process, learn various techniques for data mining, and apply the techniques in solving problems using data mining tools and systems. Prerequisite(s): CIS 3302 or CIS 4301.

CIS 4307. Topics in Networking. 3 Semester Credit Hours.
Explore selected topics in alternative or innovative network software packages, including network focused tools, utilities, and operating systems. Special emphasis on an exploration of the usefulness and operation of the topic of study. May be repeated once for credit as topics vary. Prerequisite(s): Varies with topic.

CIS 4308. Advanced Programming Language. 3 Semester Credit Hours.
Develop programming proficiency in a modern programming language. May be repeated as topics vary. Prerequisite(s): Varies with topic or Permission of department chair.

CIS 4309. Decision Support Methods. 3 Semester Credit Hours.
Use computer-based decision, analysis, planning, and presentation methods in the context of management strategy and problem-solving policy. Apply software tools such as databases, spreadsheets, statistical graphics, and presentation programs for extracting, organizing, and presenting information in support of management decision making. Prerequisite(s): COSC 1301 or CIS 3300, or ACCT 2302 or ACCT 2402 or MGMT 3301 or FIN 3301 or MKTG 3314 or BUSI 3311, or permission of department chair.

CIS 4310. Artificial Intelligence. 3 Semester Credit Hours.
A study of AI programming techniques and tools. Topics include Expert Systems, Neural Networks, Genetic Algorithms, Automatic Programming, heuristic search, and others. Prerequisite(s): CIS 3330 or CIS 3331 or CIS 3332 or permission of department chair.

CIS 4311. Android Application Development. 3 Semester Credit Hours.
This course explores the design and development of mobile applications such as Android, including resources, user interfaces, services, alarms, maps and location based services. Prerequisite(s): CIS 3332 or Permission of Department Chair.

CIS 4335. UNIX Systems Administration and Programming. 3 Semester Credit Hours.
Examine the fundamental principles and topics of Information Technology Security and Risk Management at the organizational level. Learn critical security principles and best practices in order to plan, develop and perform security tasks. Special emphasis on hardware, software, processes, communications, applications, and policies and procedures with respect to organizational IT Security and Risk Management. Prerequisite(s): 12 hours of CIS Courses or Permission of the department chair.
CIS 4342. Computer Security Principles and Practices. 3 Semester Credit Hours.
Explore current principles, theories, and concepts behind computer security. Examine basic methods and practices of security as it affects modern business operations. Special emphasis on cryptography, authentication, access control, database security, malware, intrusion detection, firewalls, security policy and management, software and operating system security, auditing and legal aspects of cyber security. Prerequisite(s): 12 hours of CIS courses or permission of department chair.

CIS 4343. Advanced Systems and Analysis. 3 Semester Credit Hours.
Examine data and process decomposition, and modeling in advanced systems analysis. Study the CASE tools which support models and interaction analysis of process and data. Explore the enterprise-wide view of system analysis, and understand the theory behind and the generation of normalized relational database tables. Prerequisite(s): CIS 3365 and CIS 4301 or permission of department chair.

CIS 4345. Network and Systems Security. 3 Semester Credit Hours.
Studies the issues of Network and Systems Security as a continuous process involving analysis, implementation, evaluation and maintenance. Topics will include addressing computer-related risks, case analysis, and future trends. The course will provide approaches, techniques, and best practices for securing modern electronic data systems and networks. Areas covered include information and message security, database and file integrity, physical security, security management, security risk analysis, and encryption/cryptography. Will include practical laboratories in the analysis, and configuration of networking security protocols and tools. Prerequisites: CIS 3347 or approval of Department Chair. Lab fees: $95.

CIS 4346. Applied Security. 3 Semester Credit Hours.
This course will validate and develop in-depth hands on knowledge about the operation and defense from malicious attacks. It builds on previous course work to understand rapid recovery and defense of systems from attack. Students develop knowledge about system vulnerabilities and the process of penetration of systems as a way to evaluate the security of systems. Specific topics include social engineering, malware and malicious software usage and identification, network security tool familiarization and system hardening. Prerequisite(s): CIS 4341, or CIS 4342 or approval of department chair. Lab fees: $95.

CIS 4348. Security Trends and Malware Analysis. 3 Semester Credit Hours.
This course analyzes and investigates security threats and ethical hacking methods. It will introduce students to modern malware analysis techniques through a detailed examination of malware, virus, and malicious code operation by examining case studies and hands-on interactive analysis of real world samples. The course will also examine in detail current trends in the threat environment and the most current attack exploits. Student will use a variety of methods to investigate current security threats and their mitigation. Topics include malware morphology, disassembly of malware, ethical hacking methods on systems including penetration, and trends in the threat-scape. Prerequisite(s): CIS 4345 or CIS 4346 or approval of department chair. Lab fees $95.

CIS 4350. Management Information Systems. 3 Semester Credit Hours.
(WI) Investigate management issues related to business information systems, which are designed to meet the informational needs of the various business subsystems. Special emphasis on systems development, security, and privacy and ethics associated with information systems. Credit will be awarded for only one of the following courses: ACCT 4350, CIS 4350, or MGMT 4350. Prerequisite(s): Senior standing.

CIS 4351. IS Project Management. 3 Semester Credit Hours.
This course studies the processes, methods, techniques and tools that organizations use to manage their information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course assumes that project management in the modern organization is a complex team based activity, where various types of technologies (including project management software as well as software to support group collaboration) are an inherent part of the project management process. This course also acknowledges that project management involves both the use of resources from within the firm, as well as contracted from outside the organization. Prerequisite: Senior standing or approval of department chair.

CIS 4352. Structured Query Language. 3 Semester Credit Hours.
Study relational database schema, formulating queries and sub-queries of varying complexity, embedding query statements in a "host" language, and defining and querying data views. Prerequisite(s): CIS 4301 or permission of department chair.

CIS 4356. Strategic Information Systems. 3 Semester Credit Hours.
This course will explore necessary management actions, which will ensure that information is available, correct, manipulatable, protected, and archived in proper forms to allow for a strategic use of information systems in the enterprise. Throughout this course we will review a set of conceptual frameworks of IT management, and by developing a critical view of two levels of IT management -- strategic and tactical. We will address the value/importance of IT from strategic and tactical perspectives, and the IT management challenges of managing people, processes and technology. Prerequisite(s): Senior Standing or CIS 4350 or Permission of Department Chair.

CIS 4357. Professional Senior Seminar. 3 Semester Credit Hours.
Participate in professional organizations, current events, research and presentations, job market analysis, interviewing, and resume preparation, in order to prepare for the professional certification exam. Prerequisite(s): 24 hours of CIS courses.

CIS 4375. Network Administration. 3 Semester Credit Hours.
Study communications architectures, protocols, and interfaces as related to network operating systems. Examine communications networking techniques, such as circuit switching, packet switching, broadcast networking, and internetworking. Special emphasis on installation, configuration, client handling, basic security, and troubleshooting of a network operating system. Use a modern network operating system in order to gain experience in configuration and administration of a network. Prerequisite(s): CIS 3347 or permission of department chair. Lab fee $95.
CIS 4378. Comprehensive Networking. 3 Semester Credit Hours.
A comprehensive course requiring the student to plan, analyze, design, install, and configure a working computer network. Specifically, the course will focus on the networking technology, including telecommunication basics, Local Area Networking (LAN), wide area networking (WAN), networking operating system configuration, and network analysis, maintenance and administration. Application exercises include the configuration of a network operating system, and network performance analysis and simulation. Prerequisite(s): CIS 3347 or permission of department chair. Lab fees: $95.

CIS 4379. Software Engineering for E-Business. 3 Semester Credit Hours.
This course examines the linkage of organizational strategy and electronic methods of delivering products, services, and exchanges in inter-organizational, national, and global environments. Information technology strategy and technological solutions for enabling effective business processes within and between organizations in a global environment are considered. Students study a software life-cycle model, fundamental software engineering principles, and documentation standards in detail. An E-Business team project is required, which emphasizes the production of high quality software for medium and larger scale projects. Prerequisite(s): CIS 3340 or CIS 3341 or CIS 3342 or CIS 3343 and senior standing.

CIS 4380. Software Engineering. 3 Semester Credit Hours.
Examine the production of high quality software for medium and larger scale projects. Explore theoretical software engineering research as the basis for a practical approach to developing quality software. Special emphasis on the software life-cycle model, fundamental software engineering principles, and documentation standards in detail. Prerequisite(s): CIS 3340 or CIS 3341 or CIS 3342 or CIS 3343 and senior standing.

CIS 4384. Internship in Computer Information Systems. 3 Semester Credit Hours.
Gain practical work experience as a programmer/programmer analyst. Apply the principles, concepts, and skills learned during the first three years of collegiate training to the field of computer information systems. May be repeated for credit. Prerequisite(s): Permission of internship coordinator or department chair. Field experience fee $75.

CIS 4388. Computer Information Systems Problems. 1-3 Semester Credit Hours.
Explore selected topics in business on technical computer applications, practicum, field project, or other suitable computer studies. Prerequisite(s): Varies with topic or Permission of department chair.

CIS 5090. Computer Information Systems Comprehensive Examination. 0 Semester Credit Hours.
Prepare for and take the CIS comprehensive exam. Students should take this exam in their last semester, their second to last semester, or when all the core classes have been taken. Students taking the thesis option do not need to take this exam.

CIS 5302. Object Oriented Programming. 3 Semester Credit Hours.
This course covers the concepts of object-oriented approach to software design and development. It includes a detailed discussion of programming concepts starting with the fundamentals of data types, control structures, arrays, classes and proceeding to advanced topics such as inheritance and polymorphism, creating user interfaces, and exceptions. Upon completion of this course the students will be able to design and implement applications.

CIS 5304. Data Communications for Managers. 3 Semester Credit Hours.
Examine the management and utilization of data communication technologies including technical components, configurations, applications, protocols, legal issues, software and management issues, Local Area Network (LAN) technologies, and security issues. Upon completion of this course, the students will be able to evaluate, select, and implement different data network options.

CIS 5307. Advanced Systems Analysis and Design. 3 Semester Credit Hours.
Examine system analysis and design processes. Students will be introduced to comparative development methodologies and modeling tools including project management and cost-benefit analysis; information systems planning and project identification and selection; requirements collection and structuring; process modeling; conceptual and logical data modeling; database design and implementation; design of the human-computer interface; system implementation; system maintenance and change management.

CIS 5311. Management Information Systems. 3 Semester Credit Hours.
Study the management and use of information and technology as a resource to create competitive organizations, manage global operations, provide useful products and quality services. Examine intellectual property, privacy, organizational and societal impact, legal issues, ethics, security issues, decision making, strategic information systems, and organizational support systems.

CIS 5312. Technology Support Management Operations. 3 Semester Credit Hours.
Study issues of organizing and staffing a technical support help desk. Explore the numerous management techniques and operational concepts that businesses and governmental organizations use to manage successful technical support activities. Survey the wide array of commercially available technical support software, and work with the public to deliver technical support in an operational environment.

CIS 5316. Advanced Database Management. 3 Semester Credit Hours.
Examine the methodologies of database management including data models, database design, normalization, SQL/PLSQL, NoSQL, performance and reliability, distributed database, data dictionaries, data integrity, security, and privacy.

CIS 5318. Quantitative Concepts. 3 Semester Credit Hours.
Examine and apply measurement techniques to information technology related problems. Use a statistical program to analyze data, and perform analyzes of programs and selected algorithms.

CIS 5319. Business Intelligence Systems. 3 Semester Credit Hours.
Examine the fundamentals of Business Intelligence including concepts, techniques and applications. Special emphasis on Decision Support Systems and other collaborative systems, Data Management, Data Mining, Data Visualization, Expert Systems and Intelligent Systems.

CIS 5320. Information Systems Seminar. 3 Semester Credit Hours.
Explore selected topics in information systems. Topics will vary. May be repeated once for credit as topics vary.

CIS 5325. Unified Modeling Language. 3 Semester Credit Hours.
This course covers Systems Development Life Cycle using the Unified Modeling Language (UML) in an object-oriented software system environment. Topics include modeling the elements, structure, and behaviors of object-oriented software systems using UML. Upon completion of this course, students will be able to use UML to identify objects and classes, capture requirements and define use cases, to extend and enhance visual models, and model the details of object behavior with activity and state-chart diagrams.
CIS 5345. Extensible Markup Language. 3 Semester Credit Hours. 
Study well-formed XML and validated XML documents and the language facilities for working with hierarchical data. Describe and transform XML data to an external presentation using real world problems.

CIS 5349. Topics in Programming. 3 Semester Credit Hours. 
Develop programming proficiency in a modern programming language. Undertake multiple programming assignments to achieve necessary knowledge and skills. May be repeated once for credit as topics vary. Prerequisite(s): Varies with Topic.

CIS 5351. Information Technology Project Management. 3 Semester Credit Hours. 
Study the concepts and practices of project management and its importance to improving the success of information technology projects. Utilize project management concepts and techniques within group projects, as a project manager or active team member. Topics include techniques for planning, organizing, scheduling, and controlling information systems projects.

CIS 5353. Big Data Analytics and Management. 3 Semester Credit Hours. 
Study fundamental concepts and principles of Big Data Analytics and its role in supporting/enhancing organizational decision making and predictions. Special emphasis on Big Data, trends, challenges and applications, analytic methods, tools, technologies, infrastructure and strategies for Big Data Management, data Privacy and Ethics. Prerequisite(s): CIS 5311 or permission of department chair.

CIS 5354. Advanced Methods in Big Data Analytics. 3 Semester Credit Hours. 
Study advanced concepts and principles of Big Data Analytics and its role in supporting/enhancing organizational decision making and predictions. Special emphasis on NoSQL Databases, Hadoop Ecosystem, MapReduce, Pig, Hive, Natural Language Processing, Social Network Analysis, and Data Visualization. Prerequisite(s): CIS 5353, Java Programming or permission of department chair.

CIS 5356. Web Development. 3 Semester Credit Hours. 
Examine theory and application of the multimedia application development process. Develop the web-based authoring and scripting tools, to use in the creation of various types of web-based projects. Special emphasis on the planning, design, projection, and evaluation of interactive web-based projects for delivery through a variety of media.

CIS 5370. Foundations of Information Security. 3 Semester Credit Hours. 

CIS 5376. Network Administration and Design. 3 Semester Credit Hours. 
This course explores network design, installation planning, and preparation. Topics include installing network operating system; establishing network security and services; exploring network administration, network utilities, maintenance techniques; monitoring performance; troubleshooting and configuring the network.

CIS 5380. E-Business Application Development. 3 Semester Credit Hours. 
This course provides an in-depth knowledge of systematic approach to analyze digital markets. Upon completion of this course, students will be able to design and implement an e-business project integrating database, and scripting languages. Prerequisite: CIS 5316 or perm of Chair.

CIS 5381. Research Project with Laboratory. 3 Semester Credit Hours. 
Engage in independent study in selected topics in Information Systems. May be repeated for credit once when topics change. Prerequisite(s): Varies with topic.

CIS 5382. Research Methods in Computer Information Systems. 3 Semester Credit Hours. 
This course provides an overview of research problems and techniques in information systems. Upon completion of this course, students will be able to formulate a research question; conduct a literature survey; select appropriate research methods to answer their research questions; collect and analyze data.

CIS 5384. Computer Information Systems Internship. 3 Semester Credit Hours. 
Engage in a supervised professional experience in an information technology-related position with a public or private organization. May be repeated for a total of 6 hours credit. Prerequisite(s): 6 semester hours of CIS courses or equivalent and permission of internship coordinator or department chair. Field experience fee $75.

CIS 5388. Computer Information Systems Problems. 1-3 Semester Credit Hours. 
Study selected topics in CIS and perform research within the student's area of interest as directed by the responsible professor. May be repeated as topics vary for a maximum of 6 semester hours. Prerequisite(s): Varies with topic.

CIS 5389. Special Topics in Computer Information Systems. 3 Semester Credit Hours. 
Study selected current topics in computer information systems. May be repeated once for credit as topics vary. Prerequisite(s): Varies with topic.

CIS 5398. Computer Information Systems Thesis. 1-6 Semester Credit Hours. 
Prepare and write the information systems thesis. Scheduled when the student is ready to begin the thesis. No credit until the thesis is accepted. Prerequisite(s): CIS 5382, 18-hours.

Computer Science (COSC)

COSC 3304. Topics in Computer Science. 3 Semester Credit Hours. 
Explore selected topics in computer systems including programming languages, programming techniques, or other specialized topics. May be repeated once for credit as topics vary. Prerequisite(s): Varies with topic or permission of department chair.

COSC 3320. Introduction to Software Engineering. 3 Semester Credit Hours. 
Study object-oriented software development process, requirements analysis, software design concepts and methodologies, object-oriented programming, and debugging. Prerequisite(s): COSC 2436 or permission of department chair.

COSC 3343. Computer Architecture. 3 Semester Credit Hours. (WI) Hardware and software structures found in modern digital computers. Instruction set architecture, hardwired design of the processor, assembly language programming, microprogramming, I/O and memory units, analysis of instruction usage, and hardware complexity. Prerequisite(s): COSC 2436 or CIS 3332 or CIS 3333 or permission of department chair.

COSC 3351. Data Structures. 3 Semester Credit Hours. 
Examine theory and application of commonly used computer data structures, files, file organization and access methods, databases, and other storage and retrieval methods. Prerequisite(s): A programming course in C/C++, Visual Basic, Java, or permission of department chair.
COSC 3360. Ethics in Computing. 3 Semester Credit Hours.
(WI) Examine personal and contemporary organizational ethical issues and challenges in the design, development and use of computing technologies in a global environment. Special emphasis on philosophical basis for computer ethics, reliability and safety of computer systems, protecting software and other intellectual property, computer crime and legal issues, and professional codes of ethics such as AIS, ACM, IEEE.

COSC 3380. Operating Systems. 3 Semester Credit Hours.
Examine the design and development of operating systems. Analyze current system software technology, including process management, memory organization, security, and file systems. Prerequisite(s): COSC 2436 or CIS 3330 or CIS 3331 or CIS 3332 or permission of department chair.

COSC 3443. Computer Architecture. 4 Semester Credit Hours.
(WI) Hardware and software structures found in modern digital computers. Instruction set architecture, hardwired design of the processor, assembly language programming, microprogramming, I/O and memory units, analysis of instruction usage, and hardware complexity. Prerequisite(s): COSC 2436 or CIS 3332 or CIS 3333 or permission of department chair.

COSC 4301. Database Theory and Practices. 3 Semester Credit Hours.
Examine database concepts and structures. Learn the file and data management principles underlying database construction. Explore fundamental types of database models, with emphasis on relational databases as well as on major non-relational forms. Gain experience in analysis, design, development, and optimization of working database applications on a variety of problems. Special emphasis on small and large system databases. Credit for both CIS 4301 and COSC 4301 will not be awarded. Prerequisite(s): 6 hours of computer science courses or permission of department chair.

COSC 4310. Artificial Intelligence. 3 Semester Credit Hours.
A study of AI programming techniques and tools. Topics include Expert Systems, Neural Networks, Genetic Algorithms, Automatic Programming, heuristic search, and others. Prerequisite(s): CIS 3331 or CIS 3332 or CIS 3333 or permission of department chair.

COSC 4311. Android Application Development. 3 Semester Credit Hours.
This course explores the design and development of mobile applications such as Android, including resources, user interfaces, services, alarms, maps and location based services. Prerequisite(s): CIS 3332 or permission of department chair.

COSC 4340. Analysis of Algorithms. 3 Semester Credit Hours.
Study modern computer algorithms with emphasis on how to select the best algorithm for a task considering the specific computing environment. Examine searching and sorting algorithms for their importance in computing. Special emphasis on efficiency, readability, maintainability, advanced design and analysis techniques, advanced data structures, and graph algorithms. Prerequisite(s): COSC 3351 or concurrent enrollment or permission of department chair.

COSC 4341. Information Technology Security and Risk Management. 3 Semester Credit Hours.
Examine the realm of information assurance and security. Study the fundamental principles, concepts, and common body knowledge of information security. Explore telecommunication and network security, software development and physical security, cryptography, security architecture, operations security, business continuity and disaster recovery planning. Understand the legal and ethical issues in technology security, and risk management.

COSC 4378. Computer Networks. 3 Semester Credit Hours.
A comprehensive course requiring the student to plan, analyze, design, install, and configure a working computer network. Specifically, the course will focus on the networking technology, including telecommunication basics, Local Area Networking LAN, wide area networking (WAN), networking operating system configuration, and network analysis, maintenance, and administration. Application exercises include the configuration of a network operating system, and network performance analysis and simulation. A modern network operating system will be used for extensive hands-on exercises to practice and demonstrate networking skills. Prerequisite(s): CIS 3347 or (COSC 2436 and MATH 2414) or permission of department chair. Lab fees: $95.

COSC 4379. Software Engineering for E-Business. 3 Semester Credit Hours.
This course examines the linkage of organizational strategy and electronic methods of delivering products, services and exchanges in inter-organizational, national, and global environments. Information technology strategy and technological solutions for enabling effective business processes within and between organizations in a global environment are considered. Students study a software life-cycle model, fundamental software engineering principles, and documentation standards in detail. An E-Business team project is required, which emphasizes the production of high quality software for medium and larger scale projects. Prerequisite(s): (CIS 3340 or CIS 3341 or CIS 3342) and senior standing.

COSC 4388. Computer Science Problems. 1-4 Semester Credit Hours.
Explore selected topics in computer science. May be repeated with the permission of the department chair for additional credit when fewer than four credits have been earned. Prerequisite(s): 9 hours of COSC.

COSC 4389. Special Topics in Computer Science. 3 Semester Credit Hours.
(WI) Explore selected topics in computer science, such as artificial intelligence, security, robotics, and human-computer interaction. May be repeated for additional credit with the permission of the department chair. Prerequisite(s): 9 hours of COSC.

Counseling (COUN)

COUN 5090. Comprehensive Examination. 0 Semester Credit Hours.
Study for and take the behavioral examination for Non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

COUN 5300. Behavioral Statistics. 3 Semester Credit Hours.
Study descriptive statistics with inferential statistics, correlation, one-way and two-way analysis of variance, regression analysis and experimental design. Use computer software with emphasis on experience with SPSS.

COUN 5301. Research Methods. 3 Semester Credit Hours.
Study the scientific method of research, types of research and research design. Develop a research project with the assistance of instructor. Prerequisite(s): COUN 5300 or equivalent graduate statistics course or permission of department chair.

COUN 5304. Human Development. 3 Semester Credit Hours.
Study the development of human beings from conception to death. Learn research and theory of physical, cognitive, social and personality development in each of the different age groups, prenatal, infancy, childhood, adolescence, and adulthood also covers related ethical concerns.
COUN 5307. Abnormal Behavior. 3 Semester Credit Hours.
Counselors need to understand the construct of abnormal behavior. We will examine the theories of abnormal psychology, current research through the lens of a socio-cultural model. We will also examine social and group dynamics that can elicit abnormal behavior from "normal" people. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5309. Assessment and Treatment of Marital and Family Systems. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5313. Crisis Intervention and Management. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5311. Cultural, Minority and Gender Issues. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5320. Advanced Family Systems Theory. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5350. Foundations of Counseling. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5351. Career Counseling and Guidance. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.

COUN 5352. School Counseling Seminar. 3 Semester Credit Hours.
We will examine the dynamics and treatment of situation crises in various settings. Study theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of the Department Chair.
COUN 5383. Consultation and Supervision. 3 Semester Credit Hours.
Study application of psychological principles of consultation and supervision in selected settings. Emphasis is on analysis of client and consultee/supervisor behaviors, individual and group communications, program evaluation and possible intervention options in selected environments. Prerequisite(s): COUN 5393, COUN 5350 and COUN 5353.

COUN 5386. Clinical Mental Health Internship. 3 Semester Credit Hours.
Explore professional activities in counseling and become familiar with a variety of professional activities and resources. Must complete 600 clock hours, of which at least 240 are direct client contact, in no less than two semesters and no more than three semesters. Interns will receive a minimum of 1.5 hours per week of group supervision and 1 hour per week of individual/triadic supervision. Prerequisite(s): COUN 5393 and permission of Practicum/Internship Director. Field experience fee - $75.

COUN 5388. Counseling Problems. 1-3 Semester Credit Hours.
Study of selected problems in counseling. Open to graduate students in counseling who are independently capable of developing a problem in the area of counseling and guidance. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need.

COUN 5389. Special Topics in Counseling. 3 Semester Credit Hours.
Examine current advanced study material on a specialized topic of interest to counseling and psychology. Explore required readings from current counseling and psychology publications and other related periodicals. Course may be repeated for credit as topics vary.

COUN 5391. School-Counseling Practicum I. 3 Semester Credit Hours.
Explore professional activities in guidance and counseling. Major emphasis is placed on the involvement in successful practices at the educational level of interest. Students must have met all academic and professional standards of practice before placement and lab experiences are included. Prerequisite(s): COUN 5350, COUN 5351, COUN 5353, COUN 5354, COUN 5357, COUN 5352. Field experience fee - $75.

COUN 5392. School-Counseling Practicum II. 3 Semester Credit Hours.
Experience professional activities in counseling and guidance in area of interest. Major emphasis is placed on the integration of theoretical and conceptual principles, as well as professional and personal skill development, and related ethical concerns. Prerequisite(s): COUN 5391 and the application for internship. Field experience fee - $75.

COUN 5393. Clinical Mental Health Practicum. 3 Semester Credit Hours.
Gain professional experience in marriage and family, mental health, and/ or counseling and guidance placements in the Community Counseling and Family Therapy Center, or in placements outside the university. The field experience will consist of 200 clock hours with 40 client contact hours. Weekly individual and group supervision is included. Prerequisite(s): COUN 5350, COUN 5353, COUN 5354, COUN 5357, COUN 5358 and COUN 5365 with a B or better in each course; and consent of the practicum/internship director. Field Experience fee - $75.

Criminal Justice (CRIJ)

CRIJ 3300. Juvenile Delinquency. 3 Semester Credit Hours.
Study the nature, extent, causation, treatment, and prevention of juvenile delinquency, including a survey of the procedures and operations of the juvenile justice agencies.

CRIJ 3301. Female Offenders. 3 Semester Credit Hours.
Study female offenders in the criminal justice system, including historical perspectives, juvenile offenders, programming and treatment, and prison and community corrections.

CRIJ 3305. Criminology. 3 Semester Credit Hours.
Study and critique various theories of crime causation, including an examination of classical, biological, psychological, and sociological perspectives on the etiology of crime. Maybe crosslisted with SOCI 3305. Only one may be taken for credit.

CRIJ 3310. Criminal Justice Supervision and Management. 3 Semester Credit Hours.
Study theories and principles of supervision as applied to criminal justice agencies including organization, leadership, motivation, human resources flow, and managerial ethics. Prerequisite(s): Junior classification or permission of instructor.

CRIJ 3311. Techniques of Interviewing. 3 Semester Credit Hours.
Study interview and interrogation techniques, including preparation, environmental and psychological factors, legal issues, and ethics.

CRIJ 3315. Criminal Evidence. 3 Semester Credit Hours.
Analyze the procedures and rules of evidence applied to the acquisition, offering, admissibility, and presentation of evidence from the crime scene, courtroom, and appellate court perspectives.

CRIJ 3320. Policing. 3 Semester Credit Hours.
Examine law enforcement, and the role of police in communities and society. Learn to critically evaluate policing as a profession. Special emphasis on dispelling myths and providing tools needed to reach conclusions based upon the available research in the field of police work.

CRIJ 3325. Institutional Corrections. 3 Semester Credit Hours.
Study the structure and function of correctional systems and how various philosophies of correctional treatment affect the operation of confinement institutions.

CRIJ 3330. Community Corrections. 3 Semester Credit Hours.
Study the philosophy, administrative procedures, and operational techniques used in the community based treatment and supervision of offenders.

CRIJ 3340. Homeland Security. 3 Semester Credit Hours.
Study the strategic, legal, policy, operational, and organizational issues associated with the defense of the U.S. homeland from foreign and domestic terrorist threats. Examine the psychology of mass movements, terrorists’ ideology, religion and terror, legal issues in homeland security, weapons of mass destruction, effective interfacing between local, state, and federal agencies, emergency management operations, and dealing with mass casualties.

CRIJ 3345. Criminal Justice in Film. 3 Semester Credit Hours.
Explore the role of film in the development of perceptions and stereotypes of criminals, criminal justice professionals, and victims.

CRIJ 3352. Physical Aspects of Forensic Science. 3 Semester Credit Hours.
Examine various forensic sciences and their relation to crime scene investigation and the collection, preservation and identification of evidence. Learn methods of laboratory analysis of fingerprints, firearms, tool marks, documents, and evaluate trace evidence, such as glass, soil, paint, hairs, and fibers.

CRIJ 3353. Biological Aspects of Forensic Science. 3 Semester Credit Hours.
Examine various forensic biological sciences and their relation to crime scene investigation and the collection, preservation and identification of evidence. Learn methods of laboratory analysis including forensic disciplines of pathology, anthropology, odontology, entomology, toxicology, serology, DNA, and blood pattern analysis.
CRIJ 3384. Criminal Justice Field Experience. 3 Semester Credit Hours.
Application and integration of academic content and development of skills within a criminal justice setting. Entry into this course will be arranged with the internship coordinator. May be taken more than once for credit. Field experience fee $75.

CRIJ 4300. Treatment in Corrections. 3 Semester Credit Hours.
Examines the various types of treatment provided in corrections. Students learn about treatment practices and programs used in corrections, with an emphasis on evidence-based practices. Examines research on the effectiveness of treatment programs.

CRIJ 4303. Race, Crime, and Justice. 3 Semester Credit Hours.
Examines racial profiling, immigration, the death penalty in the context of criminal justice practice. Provides current issues regarding the relationship between race and ethnicity and all components of the criminal justice system in the US. One may not take both this course and SOCI 3303 for credit.

CRIJ 4308. Victimology. 3 Semester Credit Hours.
This course includes a comprehensive study of victimization, including the relationship between the victims and offenders, and their interaction with the criminal justice system.

CRIJ 4312. Criminal Justice Ethics. 3 Semester Credit Hours.
(WI) Analyze contemporary ethical issues in crime and justice. Classical and contemporary ethical theories are applied to the discussion of such issues as discretion, corruption, use of force, racism, deception, professionalism, and the nature and meaning of justice.

CRIJ 4315. Criminal Justice Statistics. 3 Semester Credit Hours.
Learn statistical concepts and techniques that can assist in evaluating research. Techniques include measures of central tendency, dispersion, and significance. Examine hypothesis testing using t-tests, ANOVA, and Chi square, and learn to manipulate, analyze, and interpret data using SPSS.

CRIJ 4316. Methods of Criminal Justice Research. 3 Semester Credit Hours.
(WI) Learn the methods of criminological and criminal justice research, with emphasis on research ethics, research design, and methods of data collection and analysis.

CRIJ 4320. Criminal Justice Statistics II. 3 Semester Credit Hours.
Learn intermediate-level statistics used in Criminal Justice research, with focus on statistical analyses commonly used in hypothesis testing with an introduction to measures of association and multivariate analyses. Prerequisite(s): CRIJ 4315 or permission of instructor.

CRIJ 4350. Advanced Investigation. 3 Semester Credit Hours.
Explore advanced criminal and civil investigation, with an introduction to special investigative techniques. Emphasis on crime scene processing, crime scene analysis, forensic evaluations, investigative techniques, and investigative surveys.

CRIJ 4351. Forensic Anthropology. 3 Semester Credit Hours.
Apply the science of physical anthropology to the legal investigative process. Learn to identify human remains, as well as age, sex, ancestry, and stature of those remains and how these are used to help establish positive identification. Special emphasis on skeletal trauma and pathology to determine cause and manner of death. Cross-listed with ANTH 4351; only one may be taken for credit.

CRIJ 4388. Criminal Justice Problems. 3 Semester Credit Hours.
Engage in independent reading, research, and discussion on selected criminal justice topics. Entry into this course will be arranged by the instructor.

CRIJ 4389. Special Topics in Criminal Justice. 3 Semester Credit Hours.
Explore selected criminal justice topics. Topics will vary according to timeliness and special needs. May be taken more than once for credit.

CRIJ 4395. Criminal Justice Senior Seminar. 3 Semester Credit Hours.
Utilize knowledge of the criminal justice system in the capstone of the criminal justice curriculum. Examine current practices related to operations, recruitment, testing, training, and law, to prepare for entry to the criminal justice profession. Prerequisite(s): CRIJ 3305, CRIJ 3310 and CRIJ 4316. Restricted to senior-year CJ majors.

CRIJ 5090. Criminal Justice Comprehensive Examination. 0 Semester Credit Hours.
Study and integrate criminal justice knowledge in order to take the criminal justice comprehensive exam for non-thesis students. Non-thesis students should register for the comprehensive examination during their final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

CRIJ 5198. Criminal Justice Thesis. 1-3 Semester Credit Hours.
Prepare and write a graduate thesis in the field of criminal justice. This course represents a student’s initial and continuing thesis enrollment. At least six total hours is required to complete the thesis requirement. The student continues to enroll in this course until the thesis is submitted and the thesis is successfully defended.

CRIJ 5300. Linear Regression. 3 Semester Credit Hours.
Introduces students to statistical concepts and techniques that can assist them in evaluating research and in engaging in research on the graduate level. Both bivariate and multiple regression techniques will provide the main content of the course. Prerequisite(s): 3 hours in undergraduate or graduate statistics, or consent of instructor.

CRIJ 5301. Advanced Criminology. 3 Semester Credit Hours.
Examine major theoretical perspectives of crime and deviance. Analyze theories for their logical and empirical adequacy in light of what is known about the distribution of crime and deviant behavior. Prerequisite(s): Undergraduate or graduate coursework in Criminology or permission of instructor.

CRIJ 5302. Philosophy of Law. 3 Semester Credit Hours.
Explores the origin of law, the purpose of law, and law and morality. Examine different philosophical perspectives influencing law makers, law enforcers, and judicial decision making.

CRIJ 5303. Race and Ethnicity. 3 Semester Credit Hours.
Examine issues related to racial and ethnic minorities and crime in America, including perceptions of race, class, offending, and victimization. Emphasis on disparities in offending, victimization, law enforcement practices, trial process, and sentencing.

CRIJ 5304. Advanced Methods in Criminal Justice. 3 Semester Credit Hours.
Study social scientific research methods applied to criminal justice research, and critically examine research designs and published findings. Includes an advanced review of procedures and techniques for research in criminology, law enforcement, courts, and corrections. Prerequisite(s): Undergraduate or Graduate course in Research Methods or permission of instructor.

CRIJ 5306. Criminal Justice Program Evaluation. 3 Semester Credit Hours.
Learn to define program evaluation, the need for program evaluations, and the methods used to conduct evaluations.
CRIJ 5307. Homeland Security. 3 Semester Credit Hours.
Study strategic, legal, policy, operational, and organizational issues
associated with the defense of the U.S. homeland from foreign and
domestic terrorist threats. Topics include legal issues in Homeland
Security, effective interfacing between local, state, and federal agencies,
emergency management operations, and planned response strategies.
Maybe crosslisted with HLS 5307. Only one may be taken for credit.

CRIJ 5308. Victimology. 3 Semester Credit Hours.
This course includes a comprehensive study of victimization, including
the relationship between the victims and offenders, and their interaction
with the criminal justice system. Students will provide a literature review
on a topic of interest.

CRIJ 5309. Terrorism. 3 Semester Credit Hours.
Examine the definitions, history, beliefs, practices, organizational
structure, and conflicts involved in terrorist activities. Address funding and
criminal connections with terrorist organizations, efforts at
counterterrorism as well as the psychological aspects of suicide
terrorism.

CRIJ 5310. Criminal Justice System. 3 Semester Credit Hours.
Examine the criminal justice system in the United States, with a systemic
approach to the study of criminal justice and the interrelationships of the
various components. Special emphasis on the social and political issues
related to the criminal justice system.

CRIJ 5311. Logistic Regression. 3 Semester Credit Hours.
Introduces students to logistic regression models for estimating discrete
or categorical variables.Prerequisite: 3 hours in CRIJ 5300, or consent of
instructor.

CRIJ 5312. Treatment in Corrections. 3 Semester Credit Hours.
Study the various types of treatment provided in corrections. Learn about
treatment programs used in correctional institutions and community
corrections, with an emphasis on evidence-based treatment.

CRIJ 5315. Graduate Proseminar. 3 Semester Credit Hours.
Introduces students to the department and faculty. Emphasis placed
on effective study habits and writing skills associated with research, as
well as other activities/parameters that will assist the student in being
successful in the program. This course is cross-listed with HLS 5315; only
one may be taken for credit.

CRIJ 5321. Leadership and Supervision. 3 Semester Credit Hours.
Examine leadership and organizational theories focused on identifying
problems and solutions in criminal justice management. The case study
method and current literature provide experiences on how leadership
styles, human resources, and the organizational environment impact
management decisions. Maybe crosslisted with HLS 5321. Only one may
be taken for credit.

CRIJ 5322. Advanced Criminal Justice Ethics. 3 Semester Credit Hours.
Study the practical implications of moral philosophy and ethics in a free
society during the day-to-day administration of a criminal justice agency.

CRIJ 5388. Criminal Justice Problems. 1-3 Semester Credit Hours.
Engage in independent reading, research, and discussion on selected
criminal justice topics. Entry into this course will be arranged with the
School Director. Students may repeat this course for a total of 6 hours
credit when topics vary.

CRIJ 5389. Special Topics in Criminal Justice. 3 Semester Credit Hours.
Examine selected topics related to criminal justice. This course may be
repeated when topics vary, for additional course credit.

Economics (ECON)

ECON 3301. Intermediate Macroeconomics. 3 Semester Credit Hours.
Study of the aggregate economy introduced in Economics 2301 with
emphasis on theory. Learn the Classical and Keynesian systems, general
equilibrium theories, economic growth, and public policy in a global
setting. Prerequisite(s): ECON 2301.

ECON 3302. Intermediate Microeconomics. 3 Semester Credit Hours.
Explore advanced studies of microeconomic theory. Special emphasis
on consumer behavior, production and cost theory, market structure, and
factor markets. Prerequisite(s): ECON 2302.

ECON 3303. Money and Banking. 3 Semester Credit Hours.
Study the structure and functions of financial markets and financial
intermediaries, the behavior and pattern of interest rates, the basic
concepts of commercial bank management, the nature of money and
the role of the Federal Reserve in its creation, the basic structure of the
economy and the impact of monetary actions on this structure. Credit for
both FIN 3303 and ECON 3303 will not be awarded. Prerequisite(s): FIN
3301.

ECON 3304. Environmental Economics. 3 Semester Credit Hours.
Study the economics of the natural environment. Economic tools and
issues such as social cost, externalities, cost-benefit analysis, property
rights, and state and federal environmental policies will be examined with
emphasis on problems associated with water pollution, waste disposal,
and society’s burden of social costs. Prerequisite(s): 3 hours ECON.

ECON 3305. Economics in Financial Markets. 3 Semester Credit Hours.
Study the aggregate financial system and capital markets and the impact
these have on financial intermediaries. Particular emphasis on flow of
funds analysis, interest rate theory, role of financial intermediaries, and
management of financial assets. Credit for both FIN 3304 and ECON 3305
will not be awarded. Prerequisite(s): FIN 3301 and ECON 3303.

ECON 3306. Political Economy. 3 Semester Credit Hours.
Study the historical, philosophical, and theoretical relationships between
the state and the economy. Credit for both POLI 3306 and ECON 3306 will
not be awarded. Prerequisite(s): 3 hours of ECON and 6 hours of POLI or
permission of instructor.

ECON 4301. International Economics. 3 Semester Credit Hours.
Analyze international economic theory and policy, the foundations of
modern trade theory and its extensions, welfare effects of tariffs and non-
tariff barriers, commercial policies of the United States, trade policies of
developing countries, multinationals, balance of payments, and foreign
exchange markets. Prerequisite(s): 3 hours ECON.

ECON 4302. Economic Development of the US. 3 Semester Credit Hours.
Survey of the economic development of the United States from colonial
times to the present. Credit for both ECON 4302 and HIST 4302 will not be
awarded. Prerequisite(s): ECON 1301 or ECON 2301 and 6 hours HIST.

ECON 4310. Managerial Economics. 3 Semester Credit Hours.
Study economic theory and methodology in business and administrative
decision-making. Learn the tools of economic analysis and their use in
formulating business policies. Particular emphasis on profits, production
and cost functions, demand theory, competitive pricing policies, and
business criteria for investment output and marketing decisions. Credit for
both FIN 4310 and ECON 4310 will not be awarded. Prerequisite(s): FIN
3301.
ECON 4321. Development of Rural Areas. 3 Semester Credit Hours.
Study the fundamental causes of economic decline in rural areas. Learn application of economic principles and theory to problems of rural areas. Evaluate current methods, and public programs for economic development, with special emphasis on applications of analytical methods to development problems. Prerequisite(s): ECON 2302.

ECON 4365. Intermediate Economics. 3 Semester Credit Hours.
Discuss the American free enterprise system, the nation's economy and its strengths and weaknesses. Examine professional journals, articles, books and reports by the government and private sources, in order to coordinate and apply the analytical knowledge acquired during the period of study. Prerequisite(s): Macroeconomics and microeconomics, college algebra or MATH 3309 or permission of instructor.

ECON 4388. Economic Problems. 1-3 Semester Credit Hours.
Study of selected problems in economics. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Entry into this course will be arranged with the Economics counselor.

ECON 5308. Managerial Economics. 3 Semester Credit Hours.
Study economic theory and methodology to business and administrative decision-making. Utilize the tools of economic analysis to demonstrate and formulate business policies. Particular emphasis on profits, production and cost functions, demand theory, competitive pricing policies, and business criteria for investment output and marketing decisions. Credit for both FIN 5308 and ECON 5308 will not be awarded.

ECON 5359. Economic Applications Issues. 3 Semester Credit Hours.
Examine the application of economic theory in the firm (micro) and in the overall economy (macro), in-depth research and analysis of current economic issues through critical examination of the professional literature and the current environment of business government.

ECON 5364. Global Commerce Seminar. 3 Semester Credit Hours.
Focus on global competitive challenges facing business management teams. Evaluate how companies have strategically entered and developed international markets and managed global diversification. Learn to analyze international market potential, assess business risks and become familiar with institutions and national policies directing international trade.

ECON 5388. Economic Problems. 1-3 Semester Credit Hours.
Study selected problems in economics. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need.

Education (EDUC)

EDUC 3300. World Regional Geography for Educators. 3 Semester Credit Hours.
Examine practices for teaching World Regional Geography. Required for a Bachelor of Science degree in Interdisciplinary Studies and for teacher certification. Must be completed before students attempt the TExES, the teacher certification exam, and before student teaching.

EDUC 3315. Literacy Instruction for Bilingual Classroom. 3 Semester Credit Hours.
Study knowledge and skills required to teach limited English language learners, with an emphasis on program implementation, curriculum, materials, oral language, literacy development and assessment strategies. Spanish and English will be spoken in this class. Prerequisite(s): Passing scores on the BTLPT – Spanish (Bilingual Target Language Proficiency Test) – Spanish, EDUC 3325, EDUC 3320 and READ 3311.

EDUC 3320. Professional Development in Learner Centered Schools. 3 Semester Credit Hours.
Examine students in learner centered schools. Study lesson planning, learning styles and strengths of diverse learners, learner-centered instructions, instructional strategies, lesson plans, TEKS educational equality, and the professional standards of educators. Technology lab and documentation of field experiences are required. Certification Fee - $150.

EDUC 3325. Fundamentals of Bilingual and English as a Second Language Education. 3 Semester Credit Hours.
Examine history, philosophies, theoretical, and legal foundations regarding Bilingual/English as a Second Language education. Learn the knowledge and skills required to teach English Language Learners, with an emphasis on instructional strategies. Prerequisite(s): EDUC 3320.

EDUC 3330. Professional Development II: Effective Instruction. 3 Semester Credit Hours.
Examine the relationship between the state-adopted curriculum, learner-centered proficiencies, and best practices. Study lesson cycles, models of learning, instruction, uses of technology, assessment, classroom management, micro-teaching and field experience. Classroom management lab and documentation of field experiences are required. Prerequisite(s): EDUC 3320 and admission to the Teacher Education Program.

EDUC 3340. Mathematics Instruction for Classroom Teachers. 3 Semester Credit Hours.
Study for preservice educators to plan, organize, deliver, and evaluate developmentally appropriate educational strategies and instructional techniques in teaching mathematics to diverse learners. Design responsive instruction appropriate for all learners which reflects an understanding of relevant mathematics content, promotes active engagement, and is based on continuous and appropriate assessment.

EDUC 3350. Science Instruction for Classroom Teachers. 3 Semester Credit Hours.
Study for preservice educators to plan, organize, deliver, and evaluate developmentally appropriate educational strategies and instructional techniques in teaching science to diverse learners. Design responsive instruction appropriate for all learners which reflects an understanding of relevant science content, promotes active engagement, and is based on continuous and appropriate assessment.

EDUC 3360. The Arts for Educators. 3 Semester Credit Hours.
This methods course is concerned with providing experience for preservice educators to plan, organize, deliver, and evaluate developmentally appropriate educational strategies and instructional techniques in teaching the arts to diverse learners. The students design responsive instruction appropriate for all learners which reflects an understanding of relevant music, art and theater content, promotes active engagement, and is based on continuous and appropriate assessment.

EDUC 4304. Early Childhood Environments Professional Development III. 3 Semester Credit Hours.
Study all aspects of classroom management, including the physical environment and use of centers for diverse groups of early elementary students. Examine current issues related to early childhood education. Demonstrate developmentally appropriate effective teaching practices in field-based setting. Prerequisite(s): Admission to the Teacher Education Program, Application for Practicum, READ 3330, EDUC 3325, EDUC 3330, EDUC 3340 and EDUC 3350; Concurrent enrollment in READ 4304, READ 4305 and EDUC 4320. Field experience fee $75.
EDUC 4305. Language Concepts and Proficiencies in a Bilingual Classroom. 3 Semester Credit Hours.
Examine curriculum requirements as applicable to bilingual education, language concepts and proficiencies needed for teaching language arts, math, science, and social studies in bilingual classrooms. Evaluate commercial and research-based programs in order to adapt materials for students with varying degrees of language and literacy proficiency. Field experiences required. Prerequisite(s): Passing scores on the BTLPT – Spanish (Bilingual Target Language Proficiency Test-Spanish), EDUC 3325, EDUC 3315, READ 3311 and READ 3335.

EDUC 4315. Elementary Curriculum, Assessment and Instruction. 3 Semester Credit Hours.
Implement assessment-driven instruction and curricular design in interdisciplinary contexts. Apply knowledge of developmental stages, learner needs, and the stated expectations of TEKS in the core content areas to design, implement, and evaluate an interdisciplinary curriculum. Study effective teaching practices, problem based learning and technology applications. Pre-requisites EDUC 3320, EDUC 3330 and concurrent enrollment in EDUC 4304, READ 4304 and READ 4305.

EDUC 4320. Social Studies Instruction for Teachers. 3 Semester Credit Hours.
This methods course is concerned with providing experience for preservice educators to plan, organize, deliver, and evaluate developmentally appropriate educational strategies and instructional techniques in teaching Social Studies to diverse learners. The students design responsive instruction appropriate for all learners which reflects an understanding of relevant content, promotes active engagement, and is based on continuous and appropriate assessment. Emphasis is on integration of content.

EDUC 4325. History for Educators. 3 Semester Credit Hours.
This methods course is concerned with providing experience for preservice educators to plan, organize, deliver, and evaluate developmentally appropriate educational strategies and instructional techniques in teaching US, Texas and world history to diverse learners. The students design responsive instruction appropriate for all learners which reflects an understanding of relevant history content, promotes active engagement, and is based on continuous and appropriate assessment.

EDUC 4330. Professional Development III. 3 Semester Credit Hours.
Field-based and practicum experiences are required in school settings, where students plan units of instruction, examine various models of instruction, analyze classroom management strategies, and demonstrate competencies in effective teaching practices. Prerequisite(s): Admission to the Teacher Education Program, EDUC 3330 and READ 3335. Field experience fee - $75.

EDUC 4335. Issues in Professional Development. 3 Semester Credit Hours.
Learn to synthesize and validate concepts encountered during clinical teaching. Emphasis on professional issues related to teaching and the school environment. Prerequisite(s): Admission to Clinical Teaching and successful completion of designated content area Texas Examination of Educator Standards (TExES). Field experience fee - $75.

EDUC 4340. Technology Application and Integration for Classroom Teachers. 3 Semester Credit Hours.
Study for preservice educators to plan, organize, deliver, and evaluate instruction for diverse learners through the effective use and integration of current technology. Use of technology for ethical and professional communication with colleagues, community, and students. Prerequisite(s): Admission to Clinical Teaching; successful completion of designated content area Texas Examination of Educator Standards (TExES); concurrent enrollment in EDUC 4691 and EDUC 4335 or permission of department chair.

EDUC 4384. Classroom Teaching Internship. 3 Semester Credit Hours.
Explore supervised field-based activities in public school classrooms. Major emphasis is placed on the development of instructional strategies and professional practices designed to improve teaching performance. May be repeated for credit. Prerequisite(s): Admission to the Teacher Education Program. Field experience fee - $75.

EDUC 4388. Education Problems. 1-3 Semester Credit Hours.
Study of selected problems in education. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Prerequisite(s): Junior or senior standing, admission to the Teacher Education Program and permission of Curriculum and Instruction Program Coordinator.

EDUC 4691. Clinical Teaching. 6 Semester Credit Hours.
Explore supervised clinical teaching in the public schools at the appropriate level (1-18). A demonstration of proficiency in the application of effective teaching practices and classroom management strategies is required. Prerequisite(s): Admission to Clinical Teaching and the successful completion of designated content area of the Texas Examination of Educator Standards (TExES). Concurrent enrollment in EDUC 4335 and EDUC 4340*, or permission of department chair. * 7-12 math students may take MATH 3315 in place of EDUC 4340. Field experience fee - $75.

EDUC 5090. Education Comprehensive Examination. 0 Semester Credit Hours.
Study and take the education examination for Non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis student do not take this examination.

EDUC 5198. Education Thesis. 1-6 Semester Credit Hours.
Independent research course in which a student proposes and completes an original, quantitative research project. Scheduled when the student is ready to begin thesis. No credit awarded until proposal and thesis are complete. Prerequisite(s): Completion of all other coursework required for the degree and consent of the major professor or permission of department chair.

EDUC 5300. Foundations and History of Education. 3 Semester Credit Hours.
Examine history of education in the United States through a study of the philosophical, historical, psychological and social foundations of curriculum. Emphasis is on the development of a philosophy of education and critical thinking about issues in education. Students must complete this course within the first twelve semester hour of graduate study.
EDUC 5301. Readings in Professional Development. 3 Semester Credit Hours.
Examine current issues in the professional development of educators. Study models of professional development, impact of professional development on public school student achievement, effective evaluation of professional development, and identification of best practice in writing and evaluating research with an emphasis on literature reviews.

EDUC 5302. Cultural Diversity in Schools and Community. 3 Semester Credit Hours.
Examine various dimensions of culture related to teaching, learning, and support services in the community. Study ethnicity, socio-economic status, language, gender, religion, age, and exceptionality.

EDUC 5304. Human Development. 3 Semester Credit Hours.
Analyze human behavior with emphasis on the child, adolescent, and adult learner. Develop insight and social and cultural forces in the formation of personality, the self, and roles in group membership.

EDUC 5306. Adult Education. 3 Semester Credit Hours.
Examine philosophy and concepts of adult education including the role of the adult educator, setting of objectives, integration of adult learning with career goals or changes and assessment of educational needs of adults.

EDUC 5311. Methods of Effective Teaching. 3 Semester Credit Hours.
Study research on effective teaching practices with an emphasis on direct instruction. Learn mastery learning, assessment of learning and use of assessment to guide instruction. Apply technology and effective teaching practices to the design and delivery of instruction. Technology lab is required. Certification Fee - $150.

EDUC 5312. Language and Social Studies Seminar. 3 Semester Credit Hours.
Learn to teach Social Studies through the application of the writing process, reading/writing connections, and children’s literature. Prerequisite(s): 18 hours of professional education course work.

EDUC 5314. Creating and Managing Learning Environment. 3 Semester Credit Hours.
Learn to create and maintain a positive learning environment. Study cultural dimensions of classroom management, motivating student achievement, fostering cooperation among students, reinforcing appropriate behavior, and ethics and law governing teacher-student relations. Apply teaching and classroom management practices in a clinical laboratory setting.

EDUC 5322. Teaching Mathematics and Science. 3 Semester Credit Hours.
Study methods and materials for the teaching of math and science. Emphasis will be on helping teachers become more effective in teaching math and science by developing questions, investigations, speculations, and explorations that reflect not only the content of each area of study, but the process involved in learning.

EDUC 5334. Curriculum for Early Childhood. 3 Semester Credit Hours.
Study early childhood education curriculum and practices. Examine current trends in early childhood curriculum with an emphasis on the modifications needed to ensure the success of all young children. Prerequisite(s): 18 hours of professional educational course work.

EDUC 5338. Curriculum Design and Implementation. 3 Semester Credit Hours.
Explore curriculum selection, design, implementation, and evaluation processes within the classroom and school district settings. Study factors that influence curriculum decision-making processes and a review of theories of curriculum development. Major emphasis on curriculum alignment and curriculum auditing.

EDUC 5340. Evidence Based Teaching. 3 Semester Credit Hours.
In this course, participants will learn about various instructional strategies to enhance learning experiences in education. The class will cover appropriate methods and techniques from basic principles of learning and brain-based/whole-brain techniques. The course will also foster the development of working skills needed in cooperative planning, selecting, and organizing teaching materials, utilization of the environment, individual and group guidance, and evaluation activities.

EDUC 5345. Advanced Instructional Strategies for Diverse Learners. 3 Semester Credit Hours.
Study appropriate methods and techniques from basic principles of learning. Develop working skills needed in cooperative planning, selecting, and organizing teaching materials, utilization of the environment, individual and group guidance, and evaluation activities.

EDUC 5350. Assessment and Interpretation for Education Leaders. 3 Semester Credit Hours.
Examine assessment as a process with emphasis on assessment of student achievement and on data interpretation for the purpose of improving instruction.

EDUC 5355. Effective Instructional Programs. 3 Semester Credit Hours.
Study research-based best instructional and curricular practices and the evaluation and enhancement of instructional and curricular programs related to identified best practices.

EDUC 5360. The Gifted Learner. 3 Semester Credit Hours.
Study characteristics and needs of gifted and talented students as they relate to both school and family settings. Different models and programs for gifted education will be studied. Formal and informal identification procedures will be examined in line with federal and state guidelines.

EDUC 5362. Creativity In the Classroom. 3 Semester Credit Hours.
Study theories and models of creativity. Emphasis will be given to identifying the creative potential of students in all classrooms. Examine and develop instructional processes which accommodate the needs of creative learners. Prerequisite(s): EDUC 5360.

EDUC 5364. Curriculum and Material Development For Gifted Learners. 3 Semester Credit Hours.
Study a comparison of regular and gifted curricula with a focus on developing an interdisciplinary curriculum for gifted learners. Examine and evaluate existing materials and equipment which support instruction for the gifted in both regular and special programs. Emphasis will be on developing and evaluating teacher constructed materials. Prerequisite(s): EDUC 5360.

EDUC 5366. Instruction and Evaluation For Gifted Learners. 3 Semester Credit Hours.
Analyze methods of determining specific learning styles and talents, with emphasis placed on implementing appropriate instruction for programs. Learn methods and tools of informal and formal evaluation and assessment. Prerequisite(s): EDUC 5360 and EDUC 5364.

EDUC 5369. Education Seminar. 1-3 Semester Credit Hours.
Presentation of project proposal, implementation, and conclusions. Must be repeated a minimum of 3 times for 1 hour credit each semester to complete masters project. Student must be continuously enrolled until the graduate project is completed.

EDUC 5370. Techniques of Research. 3 Semester Credit Hours.
Explore fundamental concepts and tools of research applied to psychological and educational problems. Study rationale of research, analysis of problems, library skills, sampling, appraisal instruments, statistical description and inference, writing the research report, and representative research designs.
EDUC 5384. Teaching Internship. 3 Semester Credit Hours.
Gain field-based experience in classroom teaching. Interns must demonstrate proficiency in applying effective teaching practices and classroom management strategies in a school classroom. Prerequisite(s): admission to a teacher certification program; satisfactory performance in the professional development courses preceding the internship. May be repeated for credit. Field experience fee - $75 or Internship fee - $1500 (effective fall 2016).

EDUC 5385. Teaching Internship II. 3 Semester Credit Hours.
Explore a supervised field-based experience in classroom teaching. Interns must demonstrate proficiency in applying effective teaching practices and classroom management strategies in a school classroom. Prerequisite(s): Admission to a teacher certification program at TAMUCT; satisfactory performance in the professional development courses preceding the internship; Second semester Prerequisite(s): EDUC 5384. Field experience fee - $75 or Internship fee - $1500 (effective fall 2016).

EDUC 5388. Special Education Problems. 1-6 Semester Credit Hours.
Study of selected problems in special education. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Open to graduate students who are capable of developing a problem independently. Prerequisite(s): Graduate major in Education.

EDUC 5389. Special Topics In Education. 3 Semester Credit Hours.
Examine different topics each semester with a focus on such subjects as the gifted student, the education of culturally disadvantaged, teacher evaluation, or other selected topics concerning the teaching/learning process. This course may be repeated for credit as topic changes. Prerequisite(s): Permission of instructor.

EDUC 5391. Gifted Education Practicum. 3 Semester Credit Hours.
Supervise professional activities in gifted and talented programs. Students will be required to demonstrate competence in the process of delivering a synergistic gifted and talented program. Prerequisite(s): Successful completion of EDUC 5360, EDUC 5362, EDUC 5364 and EDUC 5366.

**Educational Leadership (EDLD)**

EDLD 5090. Educational Leadership Comprehensive Examination. 0 Semester Credit Hours.
Study for and take the educational leadership exam for non-thesis students. Non-thesis students should register for the comprehensive examination during their final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

EDLD 5198. Educational Leadership Thesis. 1-6 Semester Credit Hours.
Prepare for and write the educational leadership thesis for graduate students. Scheduled when the student is ready to begin the thesis. No credit until the thesis is completed. Prerequisite(s): Completion of all other coursework required for the degree and consent of the major professor or permission of department chair.

EDLD 5300. Foundations of Educational Leadership. 3 Semester Credit Hours.
Study lenses of power, influence, ethics, and leadership theory. Compare personal diagnoses of leadership, learning, and personality strengths to the knowledge and skill set needed for leadership of prek-12 schools. Prerequisite(s): Admission to program and approval of program coordinator. Certification Fee - $150.

EDLD 5301. Research in Educational Leadership. 3 Semester Credit Hours.
Study the fundamentals of research with emphasis on research terminology, design, methodology, data collection, ethics, psychometric measurement qualities, and quantitative and qualitative research paradigms. Develop research and evaluation skills necessary to become critical consumers and producers of research in prek-12 schools. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5307. Leadership of Human Resources. 3 Semester Credit Hours.
Examine supervision and evaluation of faculty and staff in prek-12 schools. Study effective supervisory and evaluation approaches for the development of a continuous improvement learning culture for faculty and staff. The Texas Teacher Evaluation and Support System (T-TESS), a state-required teacher appraiser certification course, is included. $75 T-TESS certificate fee. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5309. Legal Issues in School Leadership. 3 Semester Credit Hours.
Examine legal issues impacting the administration of prek-12 schools. Understand the ethical application of legal principles found in relevant constitutional, statutory, administrative, and case law. Learn how these laws and principles determine operation, organization, and administration of prek-12 schools. Special emphasis is placed on the relationship of state and federal law. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5310. Special Educational Law. 3 Semester Credit Hours.
Examine the legal framework for special education in the United States. Understand federal constitutional provisions, federal and state statutes, and federal and state judicial decisions affecting special education, including the rules and regulations for the various federal and state agencies.

EDLD 5316. Leadership of Effective Instruction. 3 Semester Credit Hours.
Develop instructional practice in prek-12 schools with the use of data analysis, learning strategies, special programs support, technology integration, and coaching protocols. Special emphasis on maintaining a continuous improvement cycle to ensure equity and engagement of all students. Advancing Educational Leadership (AEL), a state-required teacher appraiser certification course, is included. $75 AEL certificate fee. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5317. Public School Finance and Fiscal Management. 3 Semester Credit Hours.
Study the principles of school finance, budgeting, and accounting procedures used in school districts. Special emphasis is placed on the development of a working knowledge of the history of school finance, current and emerging financial issues, litigation, budget development, fiscal policy, and accountability. Prerequisite(s): EDLD 5318 and EDLD 5336 or permission of department chair. Certification Fee - $150.

EDLD 5318. Administrative Law and Personnel Administration. 3 Semester Credit Hours.
A comprehensive study of public school law as it relates to contractual and at-will personnel. Emphasis is placed on advertising, interviewing, selecting, and evaluating personnel. Special attention is given to Equal Employment Opportunity guidelines, Federal Right to Privacy Act, employee contracts, induction, and recordkeeping. Prerequisite(s): Superintendent Certificate Program admission or permission of department chair.
EDLD 5319. The School Superintendency. 3 Semester Credit Hours.
Examine the roles and responsibilities of the chief school administrator. Emphasis is placed on the range of leadership skills that executive leadership utilize to work with the community, school board, professional staff, and students in development of a capacity-building culture and district vision. Prerequisite(s): EDLD 5318 and EDLD 5336 or permission of department chair.

EDLD 5335. Educational Planning and Resource Development. 3 Semester Credit Hours.
Develop a sustainable leadership process and examine the role of leadership in educational planning. Study strategic planning and the use of district’s major administrative systems and resources to fulfill organizational goals. Prerequisite(s): EDLD 5317, EDLD 5318, EDLD 5319 and EDLD 5338 or permission of department chair.

EDLD 5336. Instructional Development and School Improvement. 3 Semester Credit Hours.
Examine state policy affecting instructional improvement on public school campuses. Special emphasis is placed on results-based accountability systems. Explore curriculum planning and evaluation, professional development, student assessment, and data analysis utilized to develop and sustain a learning system that meets the needs of all students. Prerequisite(s): Superintendent Certificate Program admission or permission of department chair.

EDLD 5339. Processes of Educational Leadership. 3 Semester Credit Hours.
Study effective organizational processes in prek-12 schools. Special emphasis on learning organization strategies, exemplary leadership practices, and collaborative action tools, in order to support the development of a flexible and creative culture continuously engaged in school improvement. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5342. Leadership of Campus Resources. 3 Semester Credit Hours.
Examine school resources in support of school improvement. Develop integrated continuous improvement processes supported by optimal allocation of financial, human, technological, facility, time, and other campus resources. Special emphasis on developing a safe and engaging school learning environment. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5340. School-Community Relationships. 3 Semester Credit Hours.
Systems of interpretation of schools to community publics. Promotion of effective school-community relations through media of communication.

EDLD 5345. Leadership of Curriculum Systems. 3 Semester Credit Hours.
Study curriculum systems in prek-12 schools. Learn to create, integrate, implement, and evaluate curriculum. Special emphasis on curriculum leadership and decision making that link student developmental needs with high levels of learning, and supporting teachers in the curriculum implementation process. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5355. Leadership of Diverse Learning Communities. 3 Semester Credit Hours.
Study diverse prek-12 school communities with an emphasis on ethical issues dealing with leadership, governance, and policy development. Develop processes for identifying and ameliorating issues associated with demographic and cultural differences. Learn to facilitate internal and external community engagement to achieve equity and excellence within the school system. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5360. Educational Leadership Applications. 3 Semester Credit Hours.
Apply leadership theory to campus leadership practice. Analyze critical issues in school leadership through the integration of the roles of the principle with professional experience. Master’s degree comprehensive exam preparation and Principal Practicum planning are included. Prerequisite(s): Admission to program and approval of program coordinator.

EDLD 5388. Problems. 1-3 Semester Credit Hours.
Open to graduate students who are capable of developing a problem independently. Problems are chosen by the student and approved in advance by the instructor. Prerequisite(s): Full admission into the Office of Graduate Studies and a graduate degree or certification program.

EDLD 5389. Special Topics In Educ Admin. 3 Semester Credit Hours.
An examination of different topics each semester with a focus on contemporary issues in Educational Administration and leadership. This course may be repeated for credit as the topic changes.

EDLD 5391. Superintendency Practicum. 3 Semester Credit Hours.
Demonstrate competent professional practice through supervised activities in the culminating experience for the Superintendent Certificate Program. Implement an action plan for professional growth and school district improvement based on state standards and leadership practices. For satisfactory completion of practicum requirements, course may be repeated one time. Only 3 semester hours of coursework can be used to satisfy certification requirements. Field experience fee - $75. Prerequisite(s): EDLD 5317, EDLD 5318 and EDLD 5319 or permission of program coordinator.

EDLD 5392. Principalship Practicum. 3 Semester Credit Hours.
The Principalship Practicum 1 course is delivered the first semester of the two-semester practicum experience. Candidates in the course will demonstrate competent professional practice through supervised activities in the culminating experience for the MEd/Principal Certificate program. Candidates will also implement an action plan for professional growth and school improvement based on state standards and leadership practices. For satisfactory completion of practicum requirements, course may be repeated one time. Field experience fee - $75. Prerequisite(s): Admission into program and approval of program coordinator.

EDLD 5393. Principalship Practicum 2. 3 Semester Credit Hours.
The Principalship Practicum 2 course is delivered the second semester of the two-semester practicum experience. Candidates in the course will demonstrate competent professional practice through supervised activities in the culminating experience for the MEd/Principal Certificate program. Candidates will also implement an action plan for professional growth and school improvement based on state standards and leadership practices. For satisfactory completion of practicum requirements, course may be repeated one time. Field experience fee - $75. Prerequisite(s): Admission into program and approval of program coordinator.

EDTE 3300. Desktop Publishing in Classroom. 3 Semester Credit Hours.
Explore applications relating to digital graphics, printing techniques, animation products, and editing tools used in desktop publishing. Analyze K-12 Technology Applications Texas Essential Knowledge and Skills (TEKS) and create a variety of desktop publishing products for use in future classrooms.
EDTE 3305. Multimedia in the Classroom. 3 Semester Credit Hours.
An application of multimedia, graphics, and animation tools used for teaching Technology Applications. Students will apply appropriate techniques and strategies to create lesson plans and examples for use in the classroom. Prerequisite(s): EDTE 3300.

EDTE 3315. Teacher Technology Application. 3 Semester Credit Hours.
Explore field based opportunities in area schools for students to observe technology applications teachers at all levels (EC-12) and explore computer lab management in K-12 learning environments. Prerequisite(s): EDTE 3315, EDUC 3320 and admission to Teacher Education Program.

EDTE 4300. Video in the Classroom. 3 Semester Credit Hours.
Learn to teach video, graphics, and animation in K-12 Technology Applications classes. Apply tools and techniques for integrated video technology to enhance the learning environment and prepare exemplar videos and lesson plans for future classroom use. Prerequisite(s): EDTE 3315, EDUC 3320 and admission to Teacher Education Program.

EDTE 4305. Web Mastering. 3 Semester Credit Hours.
Explore and use Web technology in educational settings. Study appropriate technologies and techniques to plan and implement web based instructional products for use in the K-12 classroom. Create lesson plans and exemplar products appropriate for teaching Technology Applications in Web mastering. Prerequisite(s): EDTE 4300 and EDUC 3330.

EDTE 4310. Learning, Leading and Assessment. 3 Semester Credit Hours.
Study K-12 learning outcomes, data analysis, instructional decision making, and mentoring skills necessary for peer support. Apply tools for enhancing professional growth and productivity and use technology in communicating, collaborating, conducting research, and solving problems that typically arise in learning environments. Prerequisite(s): EDUC 3330.

EDTE 4388. Educational Technology Problems. 1-3 Semester Credit Hours.
Study of selected problems in educational technology. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Open to students of Junior or senior standing who have been admitted to the Teacher Education Program and permission of instructor and Curriculum and Instruction Program Coordinator.

EDTE 5348. K-12 Educational Technology. 3 Semester Credit Hours.
This course focuses on K-12 learning outcomes, data analysis, and instructional decision making. Mentoring skills necessary for peer support are also explored. Students will apply tools for enhancing their own professional growth and productivity and will use technology in communicating, collaborating, conducting research, and solving problems that typically arise in learning environments.

EDTE 5349. Educational Media and Technology. 3 Semester Credit Hours.
Examine the role of technology in school settings and explore available technologies and the applications for instruction. Focus is on Web 2.0 applications for communication and collaboration that expand and extend learning environments.

EDTE 5350. Teaching Desktop Publishing. 3 Semester Credit Hours.
Integrate tools of desktop publishing and graphic applications to successfully demonstrate knowledge and skills needed to teach Desktop Publishing. Explore current research in the area of technology applications. Apply tools for enhancing professional growth and productivity and use technology in communicating, collaborating, conducting research, and solving problems that typically arise in learning environments. Prerequisite(s): EDTE 5349.

EDTE 5351. Multimedia Animation for Kindergarten through 12th Grade. 3 Semester Credit Hours.
Integrate tools of multimedia, graphics, and animation to successfully demonstrate knowledge and skills necessary to teach Technology Applications Texas Essential Knowledge and Skills (TEKS). Explore current research in the area of multimedia and use technology in communicating, collaborating, conducting research, and solving problems that typically arise in learning environments. Prerequisite(s): EDTE 5350.

EDTE 5352. Teaching Kindergarten through 12th Grade Video Technology. 3 Semester Credit Hours.
Integrate tools of video and animation to successfully demonstrate knowledge and skills needed to teach the Technology Applications Texas Essential Knowledge and Skills (TEKS). Explore current research in the area of video technology and use technology in communicating, collaborating, conducting research, and solving problems that typically arise in learning environments. Prerequisite(s): EDTE 5351.

EDTE 5359. Leading and Learning with Technology. 3 Semester Credit Hours.
Learn to demonstrate the knowledge and skills necessary to teach Web mastering. Explore current research in the area of web-based applications and will use technology in communicating, collaborating, conducting research, and solving problems that typically arise in learning environments. Prerequisite(s): EDTE 5352.

EDTE 5388. Educational Technology Problem. 1-3 Semester Credit Hours.
Study of selected problems in educational technology. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Open to graduate students who are capable of developing a problem independently and permission of instructor and Curriculum and Instruction Program Coordinator. Prerequisite(s): Full admission to the Office of Graduate Studies and a graduate degree or certification program.

English (ENGL)

ENGL 3100. Discourse Theory & Application. 1 Semester Credit Hour.
Students will receive instruction and training in written discourse theory and practice as appropriate and necessary preparation for tutoring in the University Writing Center and/or the English and Languages Department Language Arts Lab. Students must receive prior permission to enroll. Prerequisite(s): ENGL 1301, ENGL 1302, 6 hours sophomore ENGL, and permission of Writing Program Director and Writing Center Directors.

ENGL 3303. Western Literature I. 3 Semester Credit Hours.
(WI) A survey of Western Literature from ancient times through the Renaissance. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3304. Western Literature II. 3 Semester Credit Hours.
(WI) A survey of Western Literature from the Enlightenment to the Present. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3305. Critical Analysis of Lit. 3 Semester Credit Hours.
(WI) A study of contemporary criticism as it relates to the study of form, theory, and content of fiction, nonfiction, drama, poetry, and other artistic expression. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3306. Readings in Adolescent Lit. 3 Semester Credit Hours.
A survey of literature with a focus on teenage audiences. Readings include both the classics and contemporary selections. Study is concerned with increasing student understanding of unique aspects of adolescent literature and its application in public school curricula. Prerequisite(s): ENGL 1301 and ENGL 1302.
ENGL 3309. Tech Writing & Document Design. 3 Semester Credit Hours.
(WI) The process of developing technical information, including researching, drafting, editing, revising, and designing technical reports, proposals, manuals, job application documents and professional correspondence for specific audiences, using word processing and graphic applications. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3310. Technical Writing & Editing. 3 Semester Credit Hours.
(WI) Study of advanced technical communication situations such as formal reports, grant proposals, and professional articles, and extensive discipline-specific professional-level practice in these forms. Study of general editorial techniques in formats, graphics, and layout and design methods in technical publications. Prerequisite(s): ENGL 1301, ENGL 1302, and 3 hours sophomore ENGL and ENGL 3309.

ENGL 3312. Graphics & Technical Writing. 3 Semester Credit Hours.
This course examines the integration of graphic components in printed and electronic mediums. Students use computer applications to compose and design graphics such as bar graphs, organizational charts, flow charts, diagrams, and drawings. Prerequisite(s): ENGL 1301, ENGL 1302, and 3 hours sophomore ENGL and ENGL 3309.

ENGL 3320. Advanced Grammars. 3 Semester Credit Hours.
An introduction to the grammatical structure of modern English at the level of word, clause, and discourse presented through the application of the principles of descriptive grammars accompanied by a review of current prescriptive grammars. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3330. Advanced Composition. 3 Semester Credit Hours.
(WI) Students examine the rhetoric of composition through intensive writing workshops and close reading of composition-related texts. The goals of the course are (1) to discover and define some coherent relations between rhetoric and composition and (2) to challenge the students' presuppositions about essayistic space through a process of peer- and instructor-reviewed writing workshops. Prerequisite(s): ENGL 1301.

ENGL 3335. Film Studies. 3 Semester Credit Hours.
(WI) A study of movies as dramas involving narrative plot, characterizations, theme, etc. and as artistic productions involving shots, cuts, and other film techniques.

ENGL 3339. Literature & Film. 3 Semester Credit Hours.
This course introduces students to the relationship between literature and film and the practice of cinematic adaptation.

ENGL 3343. Creative Writing. 3 Semester Credit Hours.
Focuses on the craft and art of writing narrative, poetic, and dramatic discourse. Attention to the conception, design, and execution both of the whole work and of elements of figurative language, characterization, dialogue, point of view, and poetic structure, as well as other elements of the craft. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3350. Children's Literature. 3 Semester Credit Hours.
A general survey of literature for children. Includes a study of types of literature for children and of the development of criteria for the selection and evaluation of children's books. This course may be counted as an elective but not towards the 24-hour advanced English requirement for an English major. Prerequisite(s): ENGL 1301, ENGL 1302, and 6 hours sophomore ENGL.

ENGL 3370. Introduction to Linguistics. 3 Semester Credit Hours.
A study of descriptive linguistics revealing the nature and scope of the characteristics and complexities of human language. Much of the course consists of learning the phonology, morphology, syntax, semantics, and pragmatics of modern English. Attention also focuses on the nature and diversity of the rule-bound creativity underlying the tacit systematic use of human language. Prerequisite(s): ENGL 1301 and ENGL 1302.

ENGL 3372. Sociolinguistics. 3 Semester Credit Hours.
Study of the relationship of language and society as shown in the following areas: language change, language variation and social class, pidgin and Creole languages, and language policy and planning.

ENGL 3374. Psycholinguistics. 3 Semester Credit Hours.
Deals with a variety of formal cognitive mechanisms that are relevant to the knowledge and use of natural languages.

ENGL 3376. Discourse Analysis. 3 Semester Credit Hours.
Investigates the structure of spoken communication from a linguistic perspective to enable students to understand narrative and conversation. Students study the principles of pragmatic theory, speech act theory and critical discourse analysis.

ENGL 4300. Shakespeare. 3 Semester Credit Hours.
An in depth study of representative types of Shakespeare's drama and poetry. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4311. History of Rhetoric. 3 Semester Credit Hours.
(WI) This course provides students with a foundation in the history of rhetoric, paying particular attention to what many have labeled as the origin of rhetorical studies in classical Greece. Prerequisites: ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4312. Rhetorical Criticism. 3 Semester Credit Hours.
(WI) This course introduces students to rhetorical criticism. Through a survey approach, students will be introduced to a wide range of analytical tools and strategies to effectively describe, analyze, and interpret a wide range of discourse. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4313. Visual Rhetoric. 3 Semester Credit Hours.
(WI) Introduces students to a variety of lenses that can be used to study visual texts, including (but not limited to) Content Analysis, Compositional Interpretation, Semiology, Psychoanalysis, Discourse Analysis, and Audience Studies. Emphasizes the importance of visual rhetoric in communication and argument. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4314. Multicultural Rhetorics. 3 Semester Credit Hours.
(WI) This course introduces students to multicultural rhetorics. Students will read texts examining the theory/practice of Asian, African, Latino/a, and African American Rhetorics. Special attention will be given to traditionally underrepresented voices in the rhetorical tradition. Prerequisites: ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4316. Literary Authors. 3 Semester Credit Hours.
(WI) An in-depth study of a single author or a single group of closely related authors. Topics vary and the course can be repeated for credit if taken under a different emphasis. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4317. Literary Themes. 3 Semester Credit Hours.
(WI) An in-depth study of one major theme in literary history. Topics vary and the course can be repeated for credit if taken under a different emphasis. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.
ENGL 4319. Literary Genres. 3 Semester Credit Hours.
(WI) An in-depth study of one major literary genre. Topics will vary and the course can be repeated for credit if taken under different emphasis. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4320. Writing for Electronic Media. 3 Semester Credit Hours.
The advanced study of and practice in writing for electronic mediums with a primary focus on planning, designing, and composing professional pages for the World Wide Web. Prerequisite(s): ENGL 1301, ENGL 1302, 3 hours sophomore ENGL and ENGL 3309.

ENGL 4330. Grant & Proposal Writing. 3 Semester Credit Hours.
This course offers advances practice in analyzing and writing proposals for businesses, governmental agencies, and/or private foundations.

ENGL 4336. Film History. 3 Semester Credit Hours.
This course examines the historical development of film as an industry and major modern art form. Attention given to important movements, periods, and nationalities.

ENGL 4337. Film Auteurs. 3 Semester Credit Hours.
This course examines the work of one or more film director. Attention given to critical analysis of representative films and comprehension of critical literature.

ENGL 4338. Film Genres. 3 Semester Credit Hours.
This course examines genre as a means of production and reception. Attention given to the recurring characters, actions, and values in films and the cultural role of these stories.

ENGL 4339. Film Theory & Criticism. 3 Semester Credit Hours.
This course examines the theoretical and critical approaches common to film. Attention given to the major approaches to understanding film from the spectator’s side of the camera.

ENGL 4340. Adv Studies in Secondary Engl. 3 Semester Credit Hours.
This course applies the standards of the National Council of Teachers of English to the curriculum of secondary English. It provides an intensive review of composition principles, language conventions, literary genres, and computer instructional technology. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 4378. History of the English Language. 3 Semester Credit Hours.
Diachronic study of the English language with focus on the Old English, Middle English, and Modern English periods. Topics include phonological, morphological, syntactic, and lexical change in English along with the cultural and historical events and contact situations, which accompany language development.

ENGL 4388. English Problems. 1-3 Semester Credit Hours.
A course featuring independent reading, research, and discussion under personal direction of instructor, topics to vary according to student need. Open to students of Senior classification with permission of department chair.

ENGL 4390. Writing Center Pedagogy. 3 Semester Credit Hours.
This class introduces students to the theory, research, and practices of tutoring writing by engaging them with the prominent scholarship on writing centers while providing practical experience through observations, co-tutoring, and live tutoring hours in the University Writing Center.

ENGL 4391. Literary Period. 3 Semester Credit Hours.
(WI) An in-depth study of one major literary period in literary history. Topics vary and the course can be repeated for credit if taken under a different emphasis. Prerequisite(s): ENGL 1301 and ENGL 1302 and one English WI course.

ENGL 5300. Shakespeare. 3 Semester Credit Hours.
A close study of Shakespeare's literature and language with selections from representative texts including the histories, comedies, tragedies, and/or sonnets.

ENGL 5310. Studies in American Literature. 3 Semester Credit Hours.
Focuses on restricted periods in American literary history. Examples include colonial American literature, the American Renaissance, American literary naturalism, post-World War II American literature, and minority literature in America. May be repeated for credit when topics vary.

ENGL 5320. Studies in English Language. 3 Semester Credit Hours.
Focuses on historical and/or linguistic study of the English language. Topics will vary. Examples include history of the English language and the English language in America. May be repeated for credit when topics vary.

ENGL 5330. Psycholinguistics. 3 Semester Credit Hours.
Deals with a variety of formal cognitive mechanisms that are relevant to the knowledge and use of natural languages. Primary emphasis is on the modular view of the mind and its consequences for both L1 and L2 language acquisition.

ENGL 5370. Studies in Comparative Lit. 3 Semester Credit Hours.
A study of written language theories. Course contents include readings from a wide spectrum including classical Greece and Rome, the European enlightenment, nineteenth century America, and modern and post-modern periods. May be retaken for credit when topics vary.

ENGL 5340. Studies in Modern Fiction. 3 Semester Credit Hours.
An evaluation of English and American short stories, novels, and related criticism. Topics will vary and will include study of themes and development of the genre. May be repeated for credit when topics vary.

ENGL 5350. Studies in Rhetoric. 3 Semester Credit Hours.
A study of written language theories. Course contents include readings from a wide spectrum including classical Greece and Rome, the European enlightenment, nineteenth century America, and modern and post-modern periods. May be retaken for credit when topics vary.

ENGL 5360. Modern American & Brit Poetry. 3 Semester Credit Hours.
A study of representative themes in the development of American and English poetry. Related critical readings will be studied. Topics will vary. May be repeated for credit when topics vary.

ENGL 5380. Shakespeare. 3 Semester Credit Hours.
A close study of Shakespeare's literature and language with selections from representative texts including the histories, comedies, tragedies, and/or sonnets.

ENGL 5374. Methods of Bib & Res Analysis. 3 Semester Credit Hours.
An introduction to methods of research and effective utilization of library resources. May include analytical bibliography, enumerative bibliography, and textual criticism.
ENGL 5380. Studies in Teaching of Comp. 3 Semester Credit Hours.
The course is devoted to the study of the aims, skills, materials, and
practices of composition teaching at college and junior college levels.
May be repeated for credit when topics vary.

ENGL 5382. Composition Assessment. 3 Semester Credit Hours.
This class introduces students to the scholarship, theory, and methods
for assessing writing with a particular focus on assessment theory and
history (especially non-psychometric understandings of validity and
reliability) and classroom assessment (e.g. grading and response) with
some discussion of large-scale assessments (e.g. program assessment,
placement, standardized testing, etc.).

ENGL 5384. English Internship. 3 Semester Credit Hours.
Supervised professional activities in the college composition classroom
including presentations, evaluation, and conferences. May be repeated
once for credit. Field experience fee $75.

ENGL 5385. Writing Program Administration. 3 Semester Credit Hours.
Investigates the work of writing program administrators, including FYC
Coordinators, WAC Coordinators, WID Coordinators, and Writing Center
Coordinators. Students can anticipate learning from current writing
program administrators.

ENGL 5386. Computer Mediated Composition. 3 Semester Credit Hours.
Explores notions of 21st century writing, paying particular attention
to digital and multimodal composition; particular attention is given to
teaching these text-types.

ENGL 5387. Studies in Literacy. 3 Semester Credit Hours.
Examines the evolution of literacy and the expectations of literate
students; approaches for conducting research in literacy studies is also
addressed.

ENGL 5388. Special Problems. 1-3 Semester Credit Hours.
Conference course. Directed independent study under supervision of a
senior faculty member.

ENGL 5390. Writing Center Pedagogy. 3 Semester Credit Hours.
This class introduces students to the theory, research, and practices of
tutoring writing by engaging them with the prominent scholarship on
writing centers while providing practical experience through observations,
co-tutoring, and live tutoring hours in the University Writing Center.

ENGL 5398. Thesis. 1-6 Semester Credit Hours.
Scheduled when student is ready to begin thesis. No credit until thesis
is accepted. Prerequisite(s): ENGL 5374, 24 hours of graduate credit and
permission of department chair.

Exercise Physiology (EPHP)

EPHP 3301. Exercise Physiology I. 3 Semester Credit Hours.
The purpose of this course is to increase the student’s knowledge
and understanding of the physiological adaptations that occur during
exercise. Emphasis will be applied to the cardiovascular, respiratory, and
digestive systems. Prerequisites: BIOL 2401, BIOL 2402.

EPHP 3302. Exercise Physiology II. 3 Semester Credit Hours.
The purpose of this course is to further increase the student’s knowledge
and understanding of the physiological adaptations that occur during
exercise. Emphasis will be applied to the nervous, muscular, skeletal, and
endocrine systems. Prerequisite: EPHP 3301.

EPHP 3303. Anatomical Kinesiology. 3 Semester Credit Hours.
The purpose of this course is to study the application of basic mechanics
of human motion to physical education activities. Includes a study
of gross anatomy with application of the anatomical and mechanical
principles involved in human movement. Prerequisites: BIOL 2401, BIOL
2402.

EPHP 3304. Exercise Biochemistry. 3 Semester Credit Hours.
This course provides an overview of the biochemistry and metabolism
related to exercise, training adaptations, and nutrition. Prerequisite:
CHEM 1411, CHEM 1412.

EPHP 3305. Principles and Techniques of Strength Training and
Conditioning. 3 Semester Credit Hours.
This course provides an overview of the principles of program design.
Methods of resistance training and assessment are emphasized in
laboratory demonstrations. Prerequisite: EPHP 3302.

EPHP 3306. Exercise Testing and Prescription. 3 Semester Credit Hours.
The purpose of this course is to teach students how to use relevant
fitness testing equipment and prescribe appropriate exercise program
based on fitness evaluations. Students will learn the guidelines and
protocols for safe and effective exercise testing for normal and special
populations. Prerequisite: EPHP 3302.

EPHP 4101. Advanced Resistance Training. 1 Semester Credit Hour.
This course provides an opportunity for students to develop an increased
understanding and appreciation for the principles of resistance training
through direct participation in this style of training. Prerequisite: EPHP
3302.

EPHP 4102. Advanced Cardiovascular Training. 1 Semester Credit Hour.
This course provides an opportunity for students to develop an increased
understanding and appreciation for the principles of cardiovascular
training through direct participation in this style of training. Prerequisite:
EPHP 3302.

EPHP 4301. Leadership in Exercise and Sport. 3 Semester Credit Hours.
(WI)The purpose of this course is to provide a general overview of
leadership dynamics and their application to exercise and sports
settings. Prerequisites: EPHP 3302.

EPHP 4302. Sports Nutrition. 3 Semester Credit Hours.
This course provides an overview of the role of nutrition as a means to
enhance health and performance in exercise and sport. Topics to be
covered include principles of healthful nutrition, energy metabolism, the
role of vitamins and minerals, ergogenic aids, and weight management.
Prerequisite: EPHP 3304.

EPHP 4395. Exercise Physiology and Human Performance Capstone. 3
Semester Credit Hours.
(WI)This course serves as a capstone seminar in which students will
demonstrate expertise in a selected area of exercise and sport science.
Prerequisites: 18 hours of EPHP credit.

EPHP 4684. Exercise Physiology and Human Performance Internship. 6
Semester Credit Hours.
The internship provides hands-on experience for the human performance
major in the area of his or her concentration. A minimum of 250 hours
on-site is required. The experience includes a special project determined
jointly by the student and the agency intern supervisor. Prerequisites:
EPHP 3301, 3302, 3303, 3304, 3305, 3306.
Family and Consumer Science (FCS)

FCS 3300. Child Development. 3 Semester Credit Hours.
Analyze a child’s physical, mental, social, and emotional development from birth to adolescence. Emphasis is placed on the child’s first six years and those factors which influence his/her growth. One hour lab per week in child development laboratory, to include directed observation of young children. Prerequisite(s): Junior classification or permission of department chair.

Finance (FIN)

FIN 3300. Introduction to Financial Planning. 3 Semester Credit Hours.
Analyze personal financial decisions, including basic financial planning, tax issues, managing savings and deposit accounts, buying real assets, the use of credit, insurance management investments and saving for retirement.

FIN 3301. Financial Management I. 3 Semester Credit Hours.
Analyze financial decision-making at the corporate level with emphasis on the maximization of stockholder wealth. Learn financial statement analysis, the valuation of stocks and bonds, cost of capital, capital budgeting, dividend policy, leverage and capital structure, methods of firm valuation, working capital management, mergers and acquisitions, and bankruptcy. Prerequisite(s): ACCT 2302 or ACCT 2402 and ECON 2301.

FIN 3302. Financial Intermediaries. 3 Semester Credit Hours.
Study the internal operations of financial intermediaries with major emphasis on organization, source and allocation of funds, supervision, and regulation. Prerequisite(s): FIN 3301 and ECON 3303.

FIN 3303. Money and Banking. 3 Semester Credit Hours.
Study the structure and functions of financial markets and financial intermediaries, the behavior and pattern of interest rates, the basic concepts of commercial bank management, the nature of money and the role of the Federal Reserve in its creation, the basic structure of the economy and the impact of monetary actions on this structure. Credit for both FIN 3303 and ECON 3303 will not be awarded. Prerequisite(s): FIN 3301.

FIN 3304. Economics in Financial Markets. 3 Semester Credit Hours.
Study the aggregate financial system and capital markets and the impact these have on financial intermediaries. Special emphasis on flow of funds analysis, interest rate theory, role of financial intermediaries, and management of financial assets. Credit for both FIN 3304 and ECON 3305 will not be awarded. Prerequisite(s): FIN 3301.

FIN 3309. Global Financial History. 3 Semester Credit Hours.
Study different financial crises in history. Explore global and long-term overviews of socio-economic factors that influence the development of financial instruments, institutions, markets and entrepreneurs.

FIN 3387. Cooperative Education. 1-3 Semester Credit Hours.
Integrate academic study with work experience that is relevant to a major or minor. Two-semester minimum requirement that may be accomplished by 1) alternating semesters of full-time study with semesters of curriculum-related employment, or 2) enrolling in courses at least half-time (6 semester hours) and working part-time in parallel positions of curriculum-related employment. Cooperative Education advisor will supervise the student’s and assign the final grades. Students may participate in the Cooperative Education but will earn only a maximum of 6 hours credit toward a degree. Prerequisite(s): Completion of 30 semester hours which includes 12 hours in the major or minor discipline in which the Cooperative Education course is desired, minimum overall GPA of 2.5 and a minimum GPA of 3.0 in the appropriate major or minor field, and permission of department chair. Field experience fee $75.

FIN 4300. Advanced Financial Management. 3 Semester Credit Hours.
Analyze value-based management techniques with emphasis on the factors affecting the corporation’s intent to maximize shareholder wealth. Explore financial statement analysis, cash flow analysis, economic and market value added securities valuation, the cost of capital, capital budgeting, capital structure, divided policy, the use of leverage, working capital management, and corporate governance. Prerequisite(s): FIN 3301.

FIN 4301. International Financial Management. 3 Semester Credit Hours.
Analyze the financing of investment abroad, the management of assets in differing financial environments, issues and questions which concern financial management of international corporations. Explore foreign investments decision, cost of capital and financial structure for multinational decision making, management of foreign subsidiary working capital, and financial control of multinational operations. Prerequisite(s): FIN 3301 or permission of department chair.

FIN 4302. Real Estate Finance. 3 Semester Credit Hours.
Study monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity acts, community reinvestment act, and state housing agency. Prerequisite(s): Permission of department chair.

FIN 4303. Case Studies in Finance. 3 Semester Credit Hours.
(WI) Utilize fundamental concepts learned in previous finance, accounting, and economics courses to analyze real-world finance problems. In structured and unstructured cases, student teams analyze problems and recommend solutions. Cases drawn from areas such as corporate finance, investments, international finance, and personal finance. Prerequisite(s): ACCT 3303.

FIN 4304. Investments. 3 Semester Credit Hours.
Study the development of investment policy, the character of investment risk, comparison of investment media, description and analysis of security markets and their operations. Prerequisite(s): FIN 3301.

FIN 4305. Federal Tax Accounting I. 3 Semester Credit Hours.
Explore the present income tax law and regulations, income tax legislation, treasury and court decisions, departmental ruling, income tax problems and returns, social security and self-employment taxes. Prerequisite(s): ACCT 2302 or ACCT 2402 and Junior classification. Credit for both ACCT 4305 and FIN 4305 will not be awarded.

FIN 4306. Federal Tax Accounting II. 3 Semester Credit Hours.
Study current income tax law and tax accounting procedures. Preparation of income tax returns of partnerships and corporations. Prerequisite(s): FIN 4305 or permission of School Director. Credit for both ACCT 4306 and FIN 4306 will not be awarded.
FIN 4307. Analysis of Fin Statements. 3 Semester Credit Hours.
Analyze corporate financial statements. Learn how information can be analyzed and processed to aid creditors, investors, managers, consultants, auditors, directors, regulators and employees in their business decisions. Prerequisite(s): FIN 3301.

FIN 4308. Risk Management. 3 Semester Credit Hours.
Analyze processing, investing, and evaluation of risk management. Examine risk management process and its application in commercial, personal, and public risk. Explore various types of insurance products, the process by which insurance is sold, and how individuals and organizations manage risk via insurance products. Prerequisite(s): FIN 3301 or permission of department chair.

FIN 4310. Managerial Economics. 3 Semester Credit Hours.
Study economic theory and methodology in business and administrative decision-making. Explore economic analysis and its use in formulating business policies. Analyze concepts of profits, production and cost functions, demand theory, competitive pricing policies, and business criteria for investment output and marketing decisions. Credit for both FIN 4310 and ECON 4310 will not be awarded. Prerequisite(s): FIN 3301.

FIN 4384. Financial Internship. 1-6 Semester Credit Hours.
Participate in a finance related position for work experience with a public or private organizations that is preapproved and supervised. May be repeated for a total of 6 credit hours. Prerequisite(s): FIN 3301 and permission of department chair.

FIN 4388. Financial Problems. 1-3 Semester Credit Hours.
Study of selected problems in finance. Engage in independent research, reading and discussions under the personal direction of the instructor. Topics may vary according to student need. May be repeated with permission department chair. Prerequisite(s): Permission of department chair.

FIN 4389. Selected Topics in Finance. 3 Semester Credit Hours.
Examine current issues and topics in finance. Study readings from current finance publications and other related periodicals. Activities may include directed study, participation in professional organizations, research and presentations, job market analysis, preparation and sitting for professional certification exams. May be repeatable for credit if the topic varies. Prerequisite(s): 12 semester hours of FIN and permission of department chair.

FIN 5301. International Fin Strategy. 3 Semester Credit Hours.
Examine the major international issues pertaining to finance, including choosing and implementing an appropriate corporate strategy, the determination of exchange rates, international risk management, transfer pricing, and evaluating and financing international investment opportunities.

FIN 5303. Bank Management. 3 Semester Credit Hours.
Study bank management and bank regulation. Examine the operations and management policies of depository institutions, the conditions that have led to bank regulation and deregulation, the risk structure of credit for commercial and consumer clients, and capital management issues for a bank.

FIN 5304. Investments. 3 Semester Credit Hours.
Explore the development of investment policy, the character of investment risk, a comparison of investment media, description and analysis of security markets and their operations. Prerequisite(s): FIN 3301 or equivalent.

FIN 5305. Corporate Finance Case Studies. 3 Semester Credit Hours.
Incorporate case studies and financial analysis to make financial management decisions. Analyze selected cases and prepare solutions. Discuss solutions in class and prepare proposals. Students will be required to use prior knowledge, current research, and analytical ability in preparing their proposals. Prerequisite(s): Graduate standing.

FIN 5306. Markets and Institutions. 3 Semester Credit Hours.
Explore the operation, mechanics, and structure of the financial system within the United States, emphasizing its institutions, markets, instruments, and monetary policy of the Federal Reserve and its impact upon financial institutions.

FIN 5307. Financial Management. 3 Semester Credit Hours.
Study financial decision making in the modern corporation. Explore capital budgeting, capital structure, corporate sources of funding, dividend policy, financial risk management, standard theories of risk and return, and valuation of assets. Prerequisite(s): FIN 3301 or equivalent.

FIN 5308. Managerial Economics. 3 Semester Credit Hours.
Analyze economic theory and methodology in business and administrative decision-making. Study the tools of economic analysis and their use in formulating business policies. Explore concepts of profits, production and cost functions, demand theory, competitive pricing policies, and business criteria for investment output and marketing decisions. Credit for both FIN 5308 and ECON 5308 will not be awarded.

FIN 5309. Global History of Finance. 3 Semester Credit Hours.
Study the history of money to develop a unified framework for understanding the economic events, public policy, and financial innovation that characterize different geographical settings over time.

FIN 5310. Risk Management. 3 Semester Credit Hours.
Explore the theory and practice of private insurance and its economic and social significance. Analyze life, health, automotive, homeowners, and liability insurance. Study various forms of risk management, characteristics of insurance contracts, government regulatory characteristics, and institutional structures are studied. Prerequisite(s): none.

FIN 5360. Finance Theory. 3 Semester Credit Hours.
Study selected theoretical models used in finance. Explore the seminal theories that make up modern finance and form the basis for current research. Prerequisite(s): FIN 5307.

FIN 5370. Consumer Finance Seminar. 3 Semester Credit Hours.
Explore consumer and business finance topics. Analyze debt management, initial public offering of a new business, Internet based finance and regulatory aspects, and management of compensation. Credit for both FIN 5370 and HRM 5326 will not be awarded.

FIN 5388. Financial Problems. 1-3 Semester Credit Hours.
This course offers students the opportunity to become acquainted with current research being conducted within the student’s area of interest.; directed reading of a number of sources selected in concert by the student’s professor. Prerequisite(s): Permission of instructor.

FIN 5389. Selected Topics in Finance. 3 Semester Credit Hours.
Examine selected topics in finance. Special emphasis on investments, corporate financial management, and financial markets and institutions. This course may be repeated for credit as the topic changes. Prerequisite(s): Graduate standing and FIN 3301 or FIN 5307 or permission of instructor.
Fine Arts (F A)

**FA 3347. Music History to 1750. 3 Semester Credit Hours.**
Explore the history of western music, beginning with the earliest musical instruments ever found, proceeding through ancient Mesopotamia, ancient Greece and Rome, and continuing through the Medieval, Renaissance, and Baroque periods of European music. Special emphasis on theoretical structure, social and historical context, interaction with other art forms, instrumentation, and others.

**FA 3349. Music History from 1750. 3 Semester Credit Hours.**
Explore the history of western music, continuing the Baroque period, and proceeding through the Classical, Romantic, and twentieth century periods. Special emphasis on theoretical structure, social and historical context, interaction with other art forms, and instrumentation.

**FA 3350. World Music. 3 Semester Credit Hours.**
Introduces ethnomusicology and a cross cultural study of music. Explore music and performance from around the world, and their impact on the political, social, religious, artistic, and economic spheres. This course is appropriate for any student of any musical background. Formal training in music is not required, and you do not have to know how to read music notation.

**FA 4301. The Arts in Contemporary Society. 3 Semester Credit Hours.**
(WI) Explore an interdisciplinary approach to the relationships of art, music, and theatre in contemporary society. Prerequisite(s): Senior or advanced Junior standing with 18 hours in ART, MUSI, or THEA or permission of department chair.

**FA 4311. The Protest Song in America. 3 Semester Credit Hours.**
(WI) This course explores the connection between songs and social/political movements in the United States from the founding of the nation to the present era with special emphasis on analyzing lyrics as poetic expressions in the great American song tradition.

**FA 4312. The Blues. 3 Semester Credit Hours.**
(WI) Explore the origins, evolution, and influence of the blues as both a musical and literary art form through its impact on American culture and society with special emphasis on analyzing blues lyrics as poetic expressions in the great American song tradition.

**FA 4321. The Artist on Film. 3 Semester Credit Hours.**
(WI) Explore a variety of films and texts on various artists in order to debate and define the stereotypes placed upon artists. Analyze the ways in which the films either clarify or distort the artist’s biography, work, and legacy.

**FA 4330. Fine Arts Seminar. 1-3 Semester Credit Hours.**
Explore current topics and issues in fine arts. Topics will vary. May be repeated twice for credit as topics vary.

**FA 4388. Fine Arts Problems. 1-3 Semester Credit Hours.**
Independent reading, research, and discussion under personal direction of instructor. Topics vary according to student need. Prerequisite(s): Permission of department chair.

Geography (GEOG)

**GEOG 3303. Geographic Techniques. 3 Semester Credit Hours.**
Examine the three main techniques in geographic analysis: computer cartography, spatial statistics, and geographic information systems (GIS). Learn basic principles and techniques of producing maps, basic spatial statistics, and the use of GIS as a tool to gather, store, manipulate, and analyze various spatial databases. Prerequisite(s): GEOG 1303 or permission of instructor.

**GEOG 4305. Geography Seminar. 3 Semester Credit Hours.**
Examine major issues within modern geography. May be repeated for credit when topics vary. Prerequisite(s): GEOG 1303 or permission of instructor.

Health (HLTH)

**HLTH 3351. Principles of Health and Fitness for Children. 3 Semester Credit Hours.**
Study health and physical education as they relate to children ages 6-14. Emphasis on skills related to personal health and safety, physical fitness, motor development, games and sports, gymnastics, and rhythmic activities. Prerequisite(s): Junior classification or permission of department chair.

Health Administration (HEAD)

**HEAD 5311. Health Administration and Strategy. 3 Semester Credit Hours.**
Analyze the foundation of strategy within the complex industry of health organizations. Study theoretical frameworks and empirical analyses to emphasize the health services administrator’s role in health care. Learn how health administrators support both the providers and recipients of health care. Use a focal point to create a deep understanding of competitive advantage in the market and in government operations.

**HEAD 5312. Health Care Economics, Finance and Accounting. 3 Semester Credit Hours.**
Study the highest cognitive and affective understanding of applied health care, economics, finance and accounting in health services organization. Analyze theoretical frameworks and empirical analyses to emphasize organizational and provider services. Use these services in relation to capacities and competencies within the health care industry and patient/client needs and wants.

**HEAD 5313. Health Policy and Law. 3 Semester Credit Hours.**
Study current policy and future political ideology and their impact on care in health organizations. Learn clinical framework to present issues and policy outcomes. Examine the basic principles and practices of laws affecting health facilities and medical practices, patient care and treatment, and medical and health employment.

**HEAD 5314. Health Informatics and Trends. 3 Semester Credit Hours.**
Study the Management Information Systems (MIS) needed in health care organizations. Explore the hardware, software, and human systems requirements for operational support. Provides a foundation for those individuals who are interested in becoming certified as computer systems managers in health care organizations.

**HEAD 5315. Health Ethics and Residency. 3 Semester Credit Hours.**
Learn historical, present and future ethical issues in health administration. Emphasis on decision, clinical, business, organizational and social ethics.

Higher Education Leadership (HIED)

**HIED 5090. Comprehensive Exam. 0 Semester Credit Hours.**

**HIED 5301. History and Organization of Higher Education. 3 Semester Credit Hours.**
This course provides an overview of the history, organizational structures, and dynamics of higher education. Particular attention is given to the diversity of post-secondary institutions in the United States and how varying institutional settings influence organizational behavior, structures, and cultural norms of operating.
HIED 5302. Planning and Resource Management in Higher Education. 3 Semester Credit Hours.
This course provides an overview of the economics and finance of higher education in the United States, with an emphasis on the analysis of financial policies and current issues at the national, state, and institutional levels.

HIED 5303. Higher Education Law. 3 Semester Credit Hours.
This course explores legal aspects and issues of constitutional, statutory, and case law and the ethical implications on professional practice and compliance. Current trends and potential ethical dilemmas of the practitioner will also be covered.

HIED 5304. Student Development and the College Environment. 3 Semester Credit Hours.
This course serves as an overview of the field of student affairs and the impact of the college environment on student development.

HIED 5305. Research Methods in Higher Education. 3 Semester Credit Hours.
This course provides a general overview of research in the field through an introduction to research methodologies and basic statistics.

HIED 5306. Critical Issues in Higher Education. 3 Semester Credit Hours.
This course is an examination of social, political, ethical, and economic issues that impact higher education.

HIED 5307. Leading Change in Higher Education. 3 Semester Credit Hours.
This course provides a survey of organizational change and corresponding leadership dynamics in the field of higher education.

HIED 5308. Assessment and Evaluation in Higher Education. 3 Semester Credit Hours.
This course examines various aspects of assessment and evaluation in higher education such as assessing student outcomes, reviewing program outcomes, and institutional accreditation.

HIED 5309. Introduction to Technology-Enhanced Learning. 3 Semester Credit Hours.
This course provides an introduction to the field of technology-enhanced learning. Social and political/economic factors, theories, learning and teaching models, technology and media innovations, institutions and systems, and major works are examined. A variety of technologies are used to support the development of foundational skills that are integral to current practice.

HIED 5310. Utilizing Technology in Course Design and Development. 3 Semester Credit Hours.
This course explores an exploration of the online teaching and learning dynamic, including its theoretical foundation and best practices. Philosophical frameworks of learning, such as instructional, social, and cognitive presence; interaction, collaboration, engagement, and participation will be discussed.

HIED 5311. Leadership and Administration in Technology-Enhanced Learning. 3 Semester Credit Hours.
This course provides an introduction to the organization, management, and administration of distance education and e-learning training programs and systems. Topics include management theory and practice, organizational behavior and change, leadership roles and styles, and planning and policy as they pertain to technology-enhanced learning.

HIED 5384. Higher Education Internship I. 3 Semester Credit Hours.
This course provides experiential learning opportunities for students within their area of emphasis. Students will be responsible for accruing 100 hours of contact with the internship site supervisor and/or time spent on internship major project.

HIED 5385. Higher Education Internship II. 3 Semester Credit Hours.
This course provides experiential learning opportunities for students within their area of emphasis. Students will be responsible for accruing 100 hours of contact with the internship site supervisor and/or time spent on internship major project. The institution site for HIED 5385 must be different than HIED 5384 and cannot be the student's current employer.

History (HIST)

HIST 3300. Historian's Craft. 3 Semester Credit Hours.
Introduces the study of history. Learn to think historically, understand how historians construct and write about the past, and critically evaluate historical arguments. Develop writing and research skills to interpret primary sources and master professional standards of presentation. Required for all history majors. Prerequisite(s) for upper level History courses, and must be taken during the first semester, open only to declared History majors or by consent of instructor.

HIST 3310. American Beginnings. 3 Semester Credit Hours.
(WI) Explore the history of America from first European contact to 1763. Special emphasis on relations between Europeans and Native Americans, imperial rivalries, and the development of the English mainland colonies. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3311. Creating a Nation. 3 Semester Credit Hours.
Explore the history of the United States from 1763 to 1815. Special emphasis on the causes and consequences of the American Revolution, the writing of the Constitution, and the triumph of liberal democracy. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3312. The Age of Jackson from 1815-1848. 3 Semester Credit Hours.
Examine American development during the Jacksonian period with an emphasis on the expansion of social and political democracy. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3313. The Civil War and Reconstruction. 3 Semester Credit Hours.
Explore the events leading to the Civil War and the impact of that war and Reconstruction on American development. Special emphasis on social and cultural forces as well as politics. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3315. Populism and Progressivism, 1877-1917. 3 Semester Credit Hours.
Study American history, at the turn of the century, emphasizing the impact of industrialism and urbanism on politics and society. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3316. Military History of the United States. 3 Semester Credit Hours.
Study the role of the military in American development with emphasis on the 20th century. Concentrates on the evolution of strategy and tactics, organizational change and civilian-military relations. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3320. Social History of the United States to 1877. 3 Semester Credit Hours.
Examine the social, cultural, and economic development of the United States from colonial times to the end of Reconstruction. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3321. Social History of the United States from 1877. 3 Semester Credit Hours.
(WI) Examine the social, cultural, and economic development of the United States since the end of Reconstruction. Prerequisite(s): 6 hours of HIST or permission of department chair.
HIST 3322. History of Texas. 3 Semester Credit Hours.
Explore Texas history from the Spanish colonial period to the present.
Concentrates on the dynamics of Hispanic heritage, the Revolution and Republic, the Civil War and Reconstruction, and the political and economic developments of the modern state. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3324. Hollywood Westerns and the American West. 3 Semester Credit Hours.
Examine the 20th century American Western history through an examination of Western films, from the early twentieth century to the present day. Analyze mythic interpretations and historical realities of the American West to understand the role of the western in shaping perceptions of the West.

HIST 3325. United States Women’s History to 1877. 3 Semester Credit Hours.
Study the history of women in America from the colonial period through 1877, with special emphasis on women’s roles in public and private life, and the historical role of women in the development of the nation.

HIST 3326. United States Women’s History from 1877. 3 Semester Credit Hours.
Study the history of women in America from 1877 through the present, with special emphasis on the emergence of modern American women during the latter part of the Nineteenth century and women’s roles in the continued development of the nation.

HIST 3327. African American History to 1877. 3 Semester Credit Hours.
Explore African American history from the colonial period to 1877, with special emphasis on the slave trade, the development of the institution of slavery, free blacks and the impact of the Civil War and Reconstruction on African Americans.

HIST 3328. African American History from 1877. 3 Semester Credit Hours.
Explore African American history from the end of Reconstruction to the present, with special emphasis on black leaders, disenfranchisement, lynching and the quest for equality in the mid-twentieth century.

HIST 3329. Church and State. 3 Semester Credit Hours.
Examine the relationship of church and state in United States history, and the role religion has played in American political life, culture, and society.

HIST 3332. The Renaissance and Reformation, 1300-1648. 3 Semester Credit Hours.
Examine European political, diplomatic, and cultural history from 1300 to 1648. Special emphasis on Renaissance Humanism, the Protestant movements, the Catholic Reformation, and the emergence of the European state system during the age of religious wars. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3339. Europe in the Middle Ages. 3 Semester Credit Hours.
Examine Medieval Europe from the decline of the ancient world to the eve of the Renaissance. Special emphasis on the political, economic and social changes underlying the formation and development of medieval civilization. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3341. Europe from 1814 - 1919. 3 Semester Credit Hours.
Examine the important developments in the political, diplomatic, social, economic, and intellectual history of Europe between the Congress of Vienna and the first World War, including the Revolution of 1848, the Industrial Revolution, and European diplomatic events leading to the Great War. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3350. Asian Civilization. 3 Semester Credit Hours.
A survey of Asian civilizations with a primary focus on the history and cultures of India, China, and Japan. Examine general trends in the political, economic, social, and intellectual history of Asia, highlighted by discussions and consideration of selected cultural elements, such as art, literature, and film.

HIST 3360. Asian Civilization. 3 Semester Credit Hours.
A survey of Asian civilizations with a primary focus on the history and cultures of India, China, and Japan. Examine general trends in the political, economic, social, and intellectual history of Asia, highlighted by discussions and consideration of selected cultural elements, such as art, literature, and film.

HIST 3361. History and Film. 3 Semester Credit Hours.
Introduces topics in history through the study of film, with supplementary reading, lectures, and discussions.

HIST 3370. Colonial Latin America. 3 Semester Credit Hours.
Examine the exploration and colonization of the Spanish and Portuguese dominions in South and Central America, including political history of the colonies, the church and colonial institutions, commercial systems of Spain and Portugal, expansion into the North American borderlands, and early independence movements. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 3371. History of Mexico Before Independence. 3 Semester Credit Hours.
Examine Mexican history from the arrival of the first peoples through the end of the Spanish colonial era. Special emphasis on early native civilizations, especially the Maya and Aztec, as well as the incursion of the Spanish and the conquest and colonization of Mexico.

HIST 3372. History of Mexico from 1821 - Present. 3 Semester Credit Hours.
Examine modern Mexico, including the independence movement, conflict of centralism and federalism, war with the United States, political and economic developments under Juarez, Maximilian, and Diaz, and the social revolution of the 20th century. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4301. United States History and the World. 3 Semester Credit Hours.
(WI) Examine the relationship of the United States to the world from 1789 to the present. Examine American diplomatic, economic, political, and social reactions to major world occurrences. Emphasis will be on the twentieth century, particularly on the two world wars and the Cold War Era.

HIST 4302. Economic Development of the United States. 3 Semester Credit Hours.
Survey the economic development of the United States from colonial times to the present. Credit for both HIST 4302 and ECON 4302 will not be awarded. Prerequisite(s): ECON 1301 or ECON 2301 and 6 hours of HIST.

HIST 4307. History Careers Outside the Classroom. 3 Semester Credit Hours.
Examine the choices available for historians who seek careers outside of classroom teaching, including museums, historic preservation, cultural resource management, archival administration, parks, oral history, corporate history, and editing and publishing. Will not count as a history course for purposes of teacher certification. Prerequisite(s): 6 hours of HIST.

HIST 4310. United States History from 1914 - Present. 3 Semester Credit Hours.
Examine the history of the United States since 1914, with an emphasis on political, social, and economic development of the nation. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4312. Topics in Women’s History. 3 Semester Credit Hours.
(WI) Explore special topics in the history of American women. May be repeated the when topic varies.
HIST 4313. Topics in African American History. 3 Semester Credit Hours.
Develop understanding of African American history through advanced study of selected topics. May be repeated when the topic varies.

HIST 4314. History of Trans-Mississippi West. 3 Semester Credit Hours.
Examines the history of the Great West from the Lewis and Clark expedition to the 20th century. Special emphasis on the West as a distinctive region in national politics, state building in the 19th century, and the development of agriculture, transportation, and commerce. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4315. History of the South. 3 Semester Credit Hours.
Surveys southern history emphasizing distinctive factors which set the region apart from the rest of the United States, including social and cultural development. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4317. Topics in Native American History. 3 Semester Credit Hours.
Examine advanced Native American history topics. May be repeated when the topic varies.

HIST 4318. Topics in Oral History. 3 Semester Credit Hours.
Examine advanced Oral History topics, including, instruction in the history, methodology, and analysis of oral history. May be repeated when the topic varies.

HIST 4327. History of Russia and Eastern Europe to 1917. 3 Semester Credit Hours.
Examination of Russia and Eastern Europe from the ancient period to the 1917 Bolshevik Revolution. Topics include: the development of Kievan Rus, the Mongol invasion, the Time of Troubles, the French Revolution and Napoleon, the Crimean War, the growth of revolutionary movements, and major philosophical, cultural, religious, and political ideas. Prerequisite: 6 hours of History or permission of Department Chair.

HIST 4328. History of the Soviet Union and Post-Soviet Russia and Eastern Europe. 3 Semester Credit Hours.
Examination of the creation and the development of the Soviet Union and Post-Soviet Europe. Major events covered include: the Bolshevik Revolution, official cultural policies, World War II, the Cold War, the fall of Communism, transition to Capitalism, resurgent nationalism, and post-Communist political movements. Prerequisites: Recommended that students take History of Russia and Eastern Europe to 1917 Required: 6 hours HIST or permission of Department Chair.

HIST 4332. England and Great Britain in 1603. 3 Semester Credit Hours.
Explore English history from Roman Britain to the death of Queen Elizabeth and the end of the Tudor dynasty. Special emphasis on the political, legal, and religious changes which formed the foundations of modern England. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4333. England and Great Britain from 1603. 3 Semester Credit Hours.
Explore English and British history from 1603 to modern times. Special emphasis on the constitutional, political, economic, and legal changes which shaped Great Britain, including a survey of the empire and the United Kingdom. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4335. Social History of Modern Europe. 3 Semester Credit Hours.
An analysis of European society since the industrial revolution, with emphasis on the social impact of industrialization and urbanization, changing patterns of social stratification, mobility, and class conflict in the 19th and 20th centuries. Pre-requisite: 6 hours of HIST or permission of department chairperson.

HIST 4336. European Intellectual and Cultural History. 3 Semester Credit Hours.
Examine the fundamental ideas in the European intellectual tradition through an analysis of primary texts. Analyze the foundations of Western thought in the Judeo-Christian and Greco-Roman traditions, as well as the ideas and ideologies that have shaped modern European mentalities. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4337. Europe from 1919 - 1945. 3 Semester Credit Hours.
Examine the period from the Paris Peace conference in 1919 to the end of the Second World War in Europe. Special emphasis on political and economic instability, the rise of dictatorships, and European diplomatic crises leading to war.

HIST 4341. Revolutionary Europe from 1789 - 1814. 3 Semester Credit Hours.
Examine the political, social, economic, and intellectual forces unleashed in the French Revolution and Napoleonic era, beginning with a study of the Old Regime and ending with the Congress of Vienna in 1814. Special emphasis on the rise of liberalism and nationalism in Europe. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4345. World War II and the Holocaust. 3 Semester Credit Hours.
Examine European history between the rise of Fascism and Communism after the Great War to the end of World War II in 1945. Special emphasis on European diplomacy in the inter-war years, the conduct of the Second World War, and the Holocaust. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4346. Topics in National Histories. 3 Semester Credit Hours.
Explore major trends in world history following World War I, including the impact of the Great Depression, the rise of totalitarianism, and the coming of World War II. Special emphasis on the postwar period. Prerequisite(s): 6 hours of HIST or permission of department chair.

HIST 4380. History Seminar. 1-3 Semester Credit Hours.
Individual instruction in selected fields of history. Emphasis on reports and wide readings in selected fields. May be taken more than once for credit. Prerequisite(s): Senior standing or permission of department chair.

HIST 4381. Concepts of History Education. 3 Semester Credit Hours.
Considers the methods and techniques for presenting historical material to secondary students. Learn to organize material into a logical framework to better present the interplay of people, nations, and cultures through time. Focuses on mastery of subject areas of the Texas Examination for Educator Standards for teacher certification.

HIST 4382. Historical Method. 3 Semester Credit Hours.
(WI) Examine the concepts basic to historical thinking, causation, periodization, change, and continuity, the roles of social forces and individuals, and problems of interpretation, accuracy, and truth. Compare the social sciences and the humanities with an emphasis on the distinctive nature of the historical discipline as it has developed through time. Prerequisite(s): HIST 3300.

HIST 4388. History Problems. 1-6 Semester Credit Hours.
Independent reading, research and discussion. Entry into this course will be arranged with the history counselor.

HIST 4389. Special Topics in History. 3 Semester Credit Hours.
Examine important periods, regions, and themes in history. May be repeated when the topic varies.
HIST 4391. History Practicum. 3 Semester Credit Hours.
Gain professional experience in the workplaces where historians find professional careers including museums, historic preservation, cultural resource management, archival administration, teaching, parks, oral history, corporate history, and editing and publishing. Will count as an elective but not for teacher certification or completion of the history major. Prerequisite(s): HIST 4307. May be repeated once for credit. Field experience fee $75.

HIST 4395. History Senior Research Seminar. 3 Semester Credit Hours.
(WI) Develop and apply historical research and writing skills through the exploration of selected topics. Prerequisite(s): HIST 2311, HIST 2312, HIST 1301 and HIST 1302.

HIST 5090. History Comprehensive Examination. 0 Semester Credit Hours.
Comprehensive Examination for non-thesis students in the field of History. The Comprehensive Examination should be completed during the final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

HIST 5198. History Thesis. 1-6 Semester Credit Hours.
Scheduled when the student is ready to begin the thesis. No credit until the thesis is completed. Prerequisite(s): 24 hours graduate credit, including HIST 5380 and at least one research seminar, and consent of major professor.

HIST 5300. Elements of Historical Inquiry. 3 Semester Credit Hours.
Examine history as a profession, including how historians read sources, pose questions, draw inferences, shape their narratives, and engage historical writings.

HIST 5307. Public History Seminar. 3 Semester Credit Hours.
Examine public history careers available for master's level history graduates in areas outside of classroom teaching. This is a gateway course for all public history courses.

HIST 5308. Museum Studies. 3 Semester Credit Hours.
Examine the theory and practice of the multiple careers available to historians in museums, including curating, collections care, educational programming, exhibits, media relations, financial development, and construction and management of facilities.

HIST 5309. Historic Preservation. 3 Semester Credit Hours.
Examine historic preservation as an area of professional employment for historians.

HIST 5310. Archival Principles and Practices. 3 Semester Credit Hours.
Examine the principles and practices of archival management.

HIST 5315. United States Foreign Policy since 1945. 3 Semester Credit Hours.
Explores United States national security and foreign policy since 1945, and the historical antecedents of contemporary foreign policy challenges. Emphasis on policy decisions, domestic and bureaucratic processes, the role of intelligence, and the use of force and diplomacy.

HIST 5320. Selected Topics in State and Local History. 3 Semester Credit Hours.
Explore selected topics in state and local history, as well as readings and research in Texas history. May be repeated when topics vary.

HIST 5322. Selected Topics in American History. 3 Semester Credit Hours.
Research and writing on selected topics in American History. May be repeated for credit when topics vary.

HIST 5325. Readings in American History to 1877. 3 Semester Credit Hours.
Explore the major themes and critical works in selected topics of American History to 1877. Writing assignments will include the types of writing conducted most frequently by historians, including book reviews, literature reviews, and annotated bibliographies.

HIST 5326. Readings in American History since 1877. 3 Semester Credit Hours.
Readings and discussions of selected problems in American History since 1877. May be repeated for credit when topics vary.

HIST 5335. Europe since 1945. 3 Semester Credit Hours.
Study the main turning points in the history of postwar Europe, with an emphasis on the European integration movement. Themes include theories of integration, the democratic deficit, the transparency, accountability, and legitimacy of European policy processes, the Common Market, monetary integration and the Euro, common foreign, security, and the defense policy, social immigration policy, issues of enlargement, and relations between the European Union and non-EU entities.

HIST 5340. Readings in European History. 3 Semester Credit Hours.
Readings and discussions of selected topics in early modern and modern European history. May be repeated for credit when topics vary.

HIST 5342. Selected Topics in European History. 3 Semester Credit Hours.
Research and writing on selected topics in European history. May be repeated for credit when topics vary.

HIST 5360. Readings in World History. 3 Semester Credit Hours.
Readings and discussion of selected topics in the history of regions and countries outside of Europe and the United States. May be repeated for credit when topics vary.

HIST 5380. Historiography and Historical Method. 3 Semester Credit Hours.
Explore various ideological schools of thought in the study of history. Emphasis on recent trends and techniques in historical writing. Prerequisite(s): HIST 5300 and full admission to the graduate program or permission of instructor.

HIST 5388. History Problems. 1-6 Semester Credit Hours.
Conference course exploring various topics in the study of history, with independent reading, research, and discussion, under supervision of senior professor.

HIST 5391. History Practicum. 3 Semester Credit Hours.
Gain professional experience in workplaces where historians find professional careers including museums, historic preservation, cultural resource management, archival administration, teaching, parks, oral history, corporate history, and editing and publishing. Will count as an elective but not for teacher certification or completion of the history major. May be repeated once for credit. Prerequisite(s): Permission of instructor and department chair. Field experience fee $75.
Homeland Security (HLS)

HLS 5301. Advanced Criminology. 3 Semester Credit Hours.
In-depth examination of major theoretical perspectives of crime and delinquency. Theories are analyzed for their logical and empirical adequacy in light of what is known about the distribution of crime. Prerequisite: undergraduate or graduate coursework in criminology/victimology, or instructor approval. This course is cross-listed with CRIJ 5301; only one may be taken for credit. Prerequisite: 3 semesters hours of upper-level, undergraduate or graduate criminology/victimology, or approval of instructor.

HLS 5307. Homeland Security. 3 Semester Credit Hours.
Study the strategic, legal, policy, operational, and organizational issues associated with the defense of the U.S. homeland from foreign and domestic terrorist threats. Topics include legal issues in Homeland Security, effective interfacing between local, state, and federal agencies, emergency management operations, and planned response strategies. Maybe crosslisted with CRIJ 5307. Only one may be taken for credit.

HLS 5309. Terrorism. 3 Semester Credit Hours.
Examine the definitions, history, beliefs, practices, organizational structure, and conflicts involved in terrorist activities. Address funding and criminal connections with terrorist organizations, and discuss efforts at counterterrorism as well as the psychological aspects of suicide terrorism. Cross-listed with CRIJ 5309; only one may be taken for credit.

HLS 5320. Religious Terrorism. 3 Semester Credit Hours.
Examine the religious motivations, support, and tactics behind the phenomena of domestic and foreign terrorism. Review case studies and histories of specific terrorist organizations, and discuss justifications for violence and terrorist targets. Cross listed with RELS 5320; only one may be taken for credit.

HLS 5321. Leadership and Supervision. 3 Semester Credit Hours.
Examine leadership and organizational theories focused on identifying problems and solutions in criminal justice management. Utilize the case study method and current literature to explore how leadership styles, human resources, and the organizational environment impact management decisions. Maybe crosslisted with CRIJ 5321. Only one may be taken for credit.

HLS 5370. Foundations of Information Security. 3 Semester Credit Hours.
Examine fundamental concepts and principles of information Security Management, and Information Assurance as it affects modern business operations. Explore major issues and legal aspects related to physical, technical, and operational cyber security measures. Develop risk management skills, and learn business access security, communication and network security, operating systems security, and identity and access control management. Maybe crosslisted with CRIJ 5370. Only one may be taken for credit. Prerequisite(s): None.

Human Resource Management (HRM)

HRM 5090. Human Resources Comprehensive Examination. 0 Semester Credit Hours.
Study and take the human resources examination for non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

HRM 5301. Human Resource Management. 3 Semester Credit Hours.
Presents the fundamental principles and techniques of personnel management and examines the management of human resources from the point of view of the personnel officer, the operational manager and the employee. Examines the responsibilities of organizational leadership for incorporating human resource issues in strategic planning and initiatives. Emphasis is placed in current legal considerations, issues and research. Prerequisite(s): BUSI 5300.

HRM 5302. Human Resource Management. 3 Semester Credit Hours.
Presents the fundamental principles and techniques of personnel management and examines the management of human resources from the point of view of the personnel officer, the operational manager and the employee. Examines the responsibilities of organizational leadership for incorporating human resource issues in strategic planning and initiatives. Emphasis is placed in current legal considerations, issues and research. Prerequisite(s): Management Leveling.

HRM 5303. Managing Human Resource Development. 3 Semester Credit Hours.
Explore the management of human resources development training programs. Examine management issues, identify and respond to training needs, cost/benefit analysis, four-phase evaluation and the selection and development of training staff. Prerequisite(s): Management Leveling.

HRM 5304. Personnel Problems Seminar. 3 Semester Credit Hours.
Study selected problems in employment, employee education and training, labor relations, industrial health and safety, wage and salary administration, and employee services. Engage in independent research, reading and discussions under the personal direction of the instructor. Topics may vary according to student need.

HRM 5305. Human Resource Law. 3 Semester Credit Hours.
Examine legal issues and regulatory processes related to employment relationships, equal employment opportunity and affirmative action, privacy, employment testing and staffing, compensation and benefits, employee/labor relations, and occupational health and safety.

HRM 5307. Human Resource Consulting and Job Analysis. 3 Semester Credit Hours.
Study theories, strategies, operational issues and research related to conducting job analyses. Learn job description and specification development. Emphasis is placed on using appropriate techniques to acquire measure, assess and use information gathered in the work place. Explore and develop consulting skills as used in the HR field. Field projects are used extensively. Prerequisite(s): HRM 5302 or the permission of instructor.

HRM 5310. The Adult Learning Environment. 3 Semester Credit Hours.
Examine learning patterns, interests and participation among adults, with implications for training and development programs. Particular attention is given to the joint responsibility for learning between trainer and adult participants.

HRM 5314. Workforce Planning and Employment. 3 Semester Credit Hours.
Study the legal, ethical and organizational considerations related to recruitment, assessment, selection, placement and appraisal of employees and managers within various types of organizations. Learn case law as a basis for discussing the role of the EEOC, INS, DOL and other enforcement agencies in this critical human resource function. Special emphasis on career development and record-keeping. Prerequisite(s): HRM 5302, HRM Leveling, or approval of the instructor.
HRM 5315. Employee Benefits and Services. 3 Semester Credit Hours.
Examine legal, social and technical issues and research surrounding current trends in employee benefit programs. Analyze group health, disability and life insurance, retirement planning, time-off (leave) and wellness programs. Emphasis is placed on program administration, implementation and evaluation. Prerequisite(s): HRM 5302 or permission of instructor.

HRM 5316. Compensation Management. 3 Semester Credit Hours.
Analyze theories, concepts, operational practices and research related to managing comprehensive compensation programs. Learn various types of compensation plans, including job evaluation levels and wage structures. Emphasis is placed on the development of sound compensation programs which consider current trends, legal implications and social requirements. Quantitative applications are required to analyze various case studies and problems. Prerequisite(s): HRM 5302, HRM Leveling, or approval of the instructor.

HRM 5324. Employment and Labor Relations. 3 Semester Credit Hours.
Explore the labor union movement and the process of collective bargaining, the formation of a union, labor agreement negotiation, labor agreement administration, grievance processes, and arbitration and mediation. Examine labor law and legal issues in labor relations, including the National Labor Relations Act and the functions of the NLRB. Negotiation skills are developed in mock labor contract negotiations. Prerequisite(s): HRM 5302 and HRM 5301 or HRM 5305 or concurrent enrollment.

HRM 5326. Human Resource Management Seminar. 3 Semester Credit Hours.
Study selected topics in human resource management. Engage in independent research, reading, and discussions under direction of professor. Topics may vary according to student need. May be repeated once for credit when topics vary.

Study basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities in a visited foreign country. Graduate students will be required to complete an extensive research project in addition to other course requirements. A study abroad at the student's expense is required. Student may complete a maximum of six hours of COBA sponsored study abroad toward degree completion. Prerequisite(s): Admission into a COBA graduate program and permission of instructor. Field experiences fee $75.

HRM 5334. Professional Issues in Human Resource. 3 Semester Credit Hours.
Examine contemporary professional issues in human resource management. Emphasis on current issues, ethical decision-making processes, workplace investigations, and continued professional development. Successful completion of a comprehensive competency examination covering the principal areas within the human resource management functions is required. Prerequisite(s): BUSI 5310, HRM 5302, HRM 5303, HRM 5305, HRM 5314 and HRM 5316, or concurrent enrollment in each.

HRM 5384. Human Resource Management Internship. 3 Semester Credit Hours.
Gain professional experience in the human resource field under the supervision of a faculty-approved management sponsor. Emphasis is placed on the application of human resource management skills to practical problems and situations. A minimum of 20 work hours per week is expected, with a total of 200-300 on-the-job hours required during the semester. Prerequisite(s): Completion of 12 graduate semester hours in Human Resource Management, preregistration coordination and permission of course instructor. Field experiences fee $75.

HRM 5388. Human Resource Management Problems. 3 Semester Credit Hours.
Study selected problems in human resource management, and conduct research within a specific area of interest. Engage in independent research, reading, and discussions as directed by the responsible professor. Topics may vary according to student need. Prerequisite(s): Permission of department chair.

Liberal Studies (LIBs)

LIBS 3300. Intro to Liberal Studies. 3 Semester Credit Hours.
(WI) Students are introduced to the major issues in interdisciplinary studies. Students research how their academic concentrations emerged as distinct disciplines and produce a research paper and presentation of their findings. Prerequisite(s): ENGL 1301.

LIBS 4395. Liberal Studies Capstone. 3 Semester Credit Hours.
(WI) This course requires students to integrate and use fundamental concepts learned in previous courses within the students' degree concentrations including research and analysis of real-world phenomena and problems. Students present written reports on their research, supplemented by appropriate internet and multimedia materials, as well as portfolios documenting their research. This is a writing intensive course for Liberal Studies majors. Prerequisite(s): BCIS 1301 or CIS 3300; ENGL 3309; senior standing and approved degree plan for Bachelor of Science in Liberal Studies program.

LIBS 5090. Comprehensive Examination. 0 Semester Credit Hours.
Non-thesis students should register for the comprehensive examination during their final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis student do not take this examination.

LIBS 5300. Interdisciplinarity. 3 Semester Credit Hours.
This course allows students to assess and to discuss various topic(s) examined from an interdisciplinary approach. Emphasis is upon investigating the contributions of interdisciplinary research in academia. Prerequisite: Graduate standing.

LIBS 5310. Interdisciplinary Methods. 3 Semester Credit Hours.
This course investigates interdisciplinary research methods and the application of these methods. Students research, write, and present projects on topic(s) related to their focus areas. Prerequisite: Graduate standing.

LIBS 5398. Interdisciplinary Capstone. 3 Semester Credit Hours.
Students enroll in this course when they are prepared to begin their capstone project. Students need to earn an A or B to complete this course satisfactorily and to earn credit. Prerequisites: 24 hours graduate credit, including LSK 5300 and LSK 5310, and consent of the MSLS Graduate Coordinator.
Management (MGMT)

MGMT 3301. Principles of Management. 3 Semester Credit Hours.
Study the basic managerial functions of planning, organizing, staffing, directing, and controlling resources to accomplish organizational goals. Special emphasis on the systems concept of management and role of the manager in each level of the organization.

MGMT 3302. Personnel and Human Resource Management. 3 Semester Credit Hours.
Study fundamental functions of human resources management, relationship between personnel management and organizations' emerging role of personnel administration in development of strategic policy for organizations. Prerequisite(s): MGMT 3301 or permission of department chair.

MGMT 3303. Supervisory Management. 3 Semester Credit Hours.
Investigate the role, function, and responsibilities of the supervisor in modern organizations through study of sociological and psychological theories in human relations. Emphasis is on development of supervisory skills in communications, motivation, discipline, morale, and grievances as they arise in superior-subordinate relationships. Prerequisite(s): MGMT 3301 or permission of department chair.

MGMT 3310. Entrepreneurship I. 3 Semester Credit Hours.
Learn how to identify and evaluate opportunities that may become the foundation for a new business ventures. Learn to develop a new business venture using the business model canvas. Assess the value of a concept and explore opportunity recognition, innovation and creativity, the legal structure of business, and types of entrepreneurial ventures. Prior knowledge in basic business fundamentals and good writing skills are preferred, but not required.

MGMT 3350. Organizational Behavior. 3 Semester Credit Hours.
Analyze behavior of people at work in all types of organizations. Learn fundamentals of organizational behavior, values, ethics, motivation, group dynamics, individual differences, attitudes, decision-making, conflict, power, change, stress, leadership, rewarding behavior, communication, and organizational structure. Prerequisite(s): MGMT 3301 and BUSI 3301.

MGMT 4302. Productive Relationships. 3 Semester Credit Hours.
Examine the practicals and theories related to dealing with human behavior. Emphasis on identifying and classifying behavior in order to better understand behavior and to develop strategies for effectively managing interpersonal relationships. A materials fee of $45 is required for needed course materials. Prerequisite(s): MGMT 3301 and BUSI 3301.

MGMT 4303. Wage and Salary Administration. 3 Semester Credit Hours.
Study wage and salary administration in public and private organizations. Examine determinants of general wage and salary levels and structures, and total compensation systems. Explore the interrelationship among employee performance, intrinsic and extrinsic rewards, perceived equitable payments, and employee satisfaction. Prerequisite(s): MGMT 3302 and BUSI 3301.

MGMT 4304. Recruitment and Selection of Human Resources. 3 Semester Credit Hours.
Study recruitment and selection of human resources for organizations. Examine optimal utilization of human resources within organizations, and the use of tests and other techniques in human resource management. Prerequisite(s): MGMT 3302 and BUSI 3301.

MGMT 4305. Human Resource Development. 3 Semester Credit Hours.
Learn practical and theoretical approaches to training and development of employees in an organization. Study role and scope of training and development functions, philosophies, strategies, needs analysis, development of program content, and evaluation Prerequisite(s): MGMT 3302 and BUSI 3301.

MGMT 4306. Employer and Labor Relations. 3 Semester Credit Hours.
Study collective bargaining, labor market fundamentals, unionism, and related issues of labor economics. Prerequisite(s): MGMT 3301.

MGMT 4310. Entrepreneurship II. 3 Semester Credit Hours.
Develop skills required to manage and grow a new venture past the start-up. Apply general business concepts to the challenges facing entrepreneurs. Draw on a broad range of business disciplines including management, marketing, finance, and accounting to develop a business plan. As such, background knowledge in these areas, as well as good writing skills, is strongly preferred, but not required. Prerequisite(s): MGMT 3301 or permission of department chair.

MGMT 4321. Production and Operations Management. 3 Semester Credit Hours.
Study industrial organization, scientific management, planning and control, building locations and layouts, wage rates, corporation relationships, and research. Prerequisite(s): MGMT 3301 and BUSI 3311.

MGMT 4322. Management Science. 3 Semester Credit Hours.
Learn quantitative techniques of decision-making with an emphasis on managerial needs. Study discipline of continuous improvement in managerial decision-making. Analyze problem definition, data gathering and analysis, process improvement, improvement control, and be able to make recommendations to improve business results. Prerequisite(s): MGMT 3301 and BUSI 3311.

MGMT 4325. Leadership Theory and Practice. 3 Semester Credit Hours.
Study leadership theories and issues with practical application of newer leadership models in contemporary organizations. Explore facets of both leadership and followership, along with the impact of the particular organizational setting and situation. Explore situation analysis through active reflection, analysis of case studies, simulations, and popular business press treatment of leadership situations. Prerequisite(s): BUSI 3301 and MGMT 3301.

MGMT 4340. Management Seminar. 3 Semester Credit Hours.
Study current issues in management. Analyze readings from current management publications and other related periodicals. May be repeated for credit when topics vary. Prerequisite(s): 15 hours of MGMT or permission of department chair.

MGMT 4350. Management Information Systems. 3 Semester Credit Hours.
(WI) Investigate management issues related to business information systems designed to meet the informational needs of the various business subsystems. Learn the concepts of systems development, security, privacy and ethics associated with information systems are stressed. Credit will be awarded for only 1 of the following courses: ACCT 4350, CIS 4350, or MGMT 4350. Prerequisite(s): BUSI 3301 and MGMT 3301.

MGMT 4354. International Management. 3 Semester Credit Hours.
Study the international dimensions of the marketplace and environment related to management. Examine the role of culture within international strategic management, organizational behavior and human resource management. Prerequisite(s): MGMT 3301, BUSI 3301 and BUSI 3344.
MGMT 4356. Global Management Practices. 3 Semester Credit Hours.
Study basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities in a visited foreign country. A study abroad at the student's expense is required. Student may complete a maximum of six hours of COBA sponsored study abroad toward degree completion. Prerequisite(s): Junior or senior standing. BUSI 4354, MGMT 4356, or MKTG 4356 may not be taken concurrently. Field assignment fee of $75.

MGMT 4360. Emergency Management. 3 Semester Credit Hours.
Learn theories, principles and approaches to emergency management. Study the Philosophy of Comprehensive Emergency Management (CEM) with its four phases of preparedness, mitigation, response, and recovery. Analyze past disasters presented along with their attendant policy formations leading to the FEMA all hazards approach.

MGMT 4370. Introduction to Project Management. 3 Semester Credit Hours.
This course provides a comprehensive overview of project management. The culture, principles, and basic techniques of project management are addressed using the project life-cycle as the primary organizational guideline. The project management functions of planning, organizing, motivating and controlling with an emphasis on the application to business and technology are explained. Basic tools of project management such as work breakdown structure, scheduling, earned value analysis, and risk management are explained and demonstrated. Prerequisites: BUSI 3301, BUSI 3311, MGMT 3301; Materials Fee: $35 for a simulation experience.

MGMT 4384. Management Internship. 3 Semester Credit Hours.
Participate in a management related position with a public or private business organization that is preapproved and supervised. May be repeated for a total of 6 credit hours. Prerequisite(s): MGMT 3301 and permission of department chair. Field experiences fee: $75.

MGMT 4388. Management Problems. 1-3 Semester Credit Hours.
Study selected problems in management. Engage in independent research, reading and discussions under the personal direction of the instructor. Topics may vary according to student need. May be repeated with permission of department chair. Prerequisite(s): Senior standing and permission of department chair.

MGMT 5090. Management Comprehensive Examination. 0 Semester Credit Hours.
Study and take the management examination for Non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis students do not take this examination.

MGMT 5301. Organizational Behavior. 3 Semester Credit Hours.
Learn behavioral theory in organizational context. Study individual and group dynamics in the business environment. Specific emphasis given to leadership, motivation, communication, employee supervision, and morale. Prerequisite(s): Management leveling.

MGMT 5302. Sustainable Business: A One Planet Approach. 3 Semester Credit Hours.
Broad overview of the definitions, theory, and leadership practices associated with strategizing, collaborating, innovating, organizing and managing the changes necessary to adopt a triple bottom line approach (people, planet, profit) for sustainable effectiveness into the organization’s business functions: marketing, finance, operations, etc. This is a foundational course for the One Planet Masters program and is intended to provide a base level of sustainability literacy needed for successful completion of the associated graduate courses. Prerequisite: Management Leveling.

MGMT 5305. Analytical Methods of Management Decisions. 3 Semester Credit Hours.
Study analytical techniques which may be used to facilitate decisions analysis. Learn concepts of utility, break even analysis, network models, linear programming, game theory and computer simulation. Use course activity to survey analytical techniques which may be used to facilitate analysis of alternative decisions and practice in applying the techniques through problem solving. Prerequisite(s): BUSI 3311 or MATH 3300 and graduate standing.

MGMT 5306. Influence Organizational Productivity By Interpersonal Relationships. 3 Semester Credit Hours.
Learn the practicals and theories related to interpersonal behavior and its influence on organizational productivity. Learn to identify and classify behavior in order to better understand behavior and to develop strategies for creating productive relationships with others. Particular emphasis is directed toward the impact of interpersonal behavior in business organizations and the potential effect on productivity. A materials fee of $45 is required for needed course materials.

MGMT 5307. Responsibilities and Ethics of Leadership. 3 Semester Credit Hours.
Analyze an organization’s social and environmental responsibilities to its employees, customers, and other key stakeholder groups. Emphasis is given to the case study method for evaluating the performance of various organizations. Develop a theoretical framework for understanding ethics, principles and values of leadership as they affect the organization, the organizational environment, and society. Prerequisite(s): Management Leveling.

MGMT 5308. Designing Organizations for Sustainable Effectiveness. 3 Semester Credit Hours.
Examines theories, processes and “fit” models of organization design and alignment of structure, technology, information systems, reward systems, people and culture, and management processes with organizational goals. Emphasis is on maximizing the triple bottom line for sustainable effectiveness and how organizations can be led and managed so they are economically, socially, and environmentally sustainable. Prerequisite(s): MGMT 5301.

MGMT 5309. Global Leadership for Sustainability. 3 Semester Credit Hours.
This course is the integrating capstone course for the MS One Planet Leadership program. Examines and both mainstream and emerging theories and approaches to leadership, including models of leadership for sustainability and developing the global mindset necessary for flourishing enterprises to maximize the triple bottom line. Applies leadership principles and models to varied organizational situations with a primary focus on developing leaders who can effectively deal with the economic, social, and environmental challenges global leaders face in today’s volatile and chaotic business climate. Prerequisite(s): Students must have completed or be currently enrolled in the core courses for the program, MGMT 5301, MGMT 5308, & MGMT 5368, or instructor approval.
MGMT 5310. Leadership Formation and Development. 3 Semester Credit Hours.
This course examines both mainstream and emerging theories and approaches to leadership development and formation, with an emphasis on case study and experiential methods of examining the application of leadership principles and models. It provides each student the opportunity to focus on developing their personal and organizational abilities and skills to become triple bottom line leaders who can better resolve the economic, social and environmental issues of the global, Internet age. Prerequisite(s): MGMT 5301.

MGMT 5311. Sustainable Operations & Services. 3 Semester Credit Hours.
Focuses on providing students with a broad understanding and knowledge of operations and service management concepts. Emphasis will be placed on incorporating various aspects of sustainability, while designing, managing and controlling business operations and services. In addition, students will be exposed to several analytical tools, models and methodologies that are necessary to design, develop and evaluate various sustainable business operations. Prerequisites: Management and Statistics Leveling.

MGMT 5315. International Management for Sustainability. 3 Semester Credit Hours.
Focus on the multinational aspects of leading and managing sustainable development. Research, synthesis, and presentation of current and seminal research on the subjects of globalization and internationalization will be dominant components. The need for social, ecological, and economic dimensions of sustainability in international business transactions will also be discussed. Prerequisite: MGMT 5301.

MGMT 5320. Negotiations. 3 Semester Credit Hours.
Learn distributive negotiation, integrative negotiation, biases and pitfalls in negotiation, building trust, developing a negotiation style, power, persuasion, ethics, creativity and problem solving. Theoretical lecture/discussion and practical application/skill development, including in-class role plays, are used in this course. A materials fee of $40 is required for needed course materials.

MGMT 5330. Cross Sector Partnerships for Sustainability. 3 Semester Credit Hours.
Cross-sector partnerships have proven to be one of the most effective approaches to complex environmental challenges. Through case studies of environmental partnerships, literature on collaboration strategies, reflective journals and field research, students will develop the skills necessary to lead future collaborative sustainability initiatives. Prerequisites: MGMT 5301 and MGMT 5307.

MGMT 5340. Management Seminar. 3 Semester Credit Hours.
Explore selected management topics of current importance to business management. May be repeated once for credit when topics vary.

MGMT 5345. Entrepreneurship. 3 Semester Credit Hours.
The course is designed to cover the fundamentals of entrepreneurship. Students will be provided with tools and methods for successfully developing and launching a new venture. Students will have an opportunity to develop a business plan, and will be exposed to concepts such as creativity, risk-taking, and sustainable entrepreneurship.

MGMT 5350. Project Management. 3 Semester Credit Hours.
Study a comprehensive overview of project management. Analyze culture, principles, and basic techniques of project management using the project life cycle as the primary organizational guideline. Learn project management functions and use basic tools of project management such as work breakdown structure, scheduling, contracting, earned value analysis, and risk management. A materials fee of $35 is required to support a learning simulation.

MGMT 5356. Global Management Practices. 3 Semester Credit Hours.
Study basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities in a visited foreign country. A study abroad at the student’s expense is required. Student may complete a maximum of six hours of COBA sponsored study abroad toward degree completion. Prerequisite(s): Admission into a COBA graduate program and permission of instructor. Field experiences fee $75.

MGMT 5368. Development & Change for Learning Organizations. 3 Semester Credit Hours.
Students apply strategies for developing organizational learning using behavioral science. Viewing organizations as complex ecological systems, students will master systems thinking related to organization development so that change efforts improve both the organization and the wider systems within which it operates. Prerequisite(s): MGMT 5301.

MGMT 5384. Management Internship. 3 Semester Credit Hours.
Participate in a management related position with a public or private business organization that is preapproved and supervised. May be repeated for a total of 6 hours credit. Prerequisite(s): Permission of department chair. Field experiences fee $75.

MGMT 5388. Management Problems. 1-6 Semester Credit Hours.
Study problems, topics, and perform research in management within the student’s area of interest. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. This course offers students the opportunity to study. Prerequisite(s): Permission of department chair.

Marketing (MKTG)

MKTG 3301. Marketing. 3 Semester Credit Hours.
Examine principles and concepts of marketing goods, services, and intangibles by profit and non-profit organizations in a free enterprise and global economy.

MKTG 3312. Public Relations. 3 Semester Credit Hours.
Study the techniques used in planning public relations programs for businesses, schools, churches, and civic associations. Learn press relations, crisis management, advertising, speech writing, and campaign activities. Prerequisite(s): MKTG 3301 and BUSI 3301.

MKTG 3315. Personal Selling. 3 Semester Credit Hours.
Study the role and techniques of personal selling as a component of the marketing mix. Prerequisite(s): MKTG 3301 and BUSI 3301.

MKTG 3316. Consumer Behavior. 3 Semester Credit Hours.
Analyze individual and group behavior of people performing in consumer role. Study buying motives, social class, and research techniques in consumer behavior. Prerequisite(s): MKTG 3301 and BUSI 3301.

MKTG 3317. Retailing. 3 Semester Credit Hours.
Learn fundamental operations of retailing, studying of buying practices, pricing, store locations and layout, sales promotions, personnel management, and stock control. Study design to aid the student seeking a general knowledge of the retail field as well as those specializing in Marketing. Prerequisite(s): MKTG 3301 and BUSI 3301.
MKTG 3318. Promotional Strategy. 3 Semester Credit Hours.
Study a controlled, integrated program of promotional variables. Learn how to present a company and its products to prospective customers, to promote need-satisfying attributes of products toward the end of facilitating sales, and long-run performance. Prerequisite(s): MKTG 3301 and BUSI 3301.

MKTG 3320. Marketing Research. 3 Semester Credit Hours.
Study accurate, objective, and systematic gathering, recording, and analyzing of data about problems relating to marketing goods and services. Prerequisite(s): MKTG 3301, BUSI 3301 and BUSI 3311.

MKTG 4301. Advertising. 3 Semester Credit Hours.
Analyze advertising in modern media. Study the history, design, effects of advertising, and the uses of different media for advertising purposes. Prerequisite(s): MKTG 3301 and BUSI 3301.

MKTG 4302. Services Marketing. 3 Semester Credit Hours.
Learn about service environment. Analyze the most successful service-oriented industries and firms within the world's fastest-growing economic sector. Prerequisite(s): MKTG 3301 and BUSI 3301.

MKTG 4305. Digital and Internet Marketing. 3 Semester Credit Hours.
This course provides a theoretical and practical understanding of digital marketing. Students will learn various digital marketing practices such as managing and executing search engine optimization campaign (e.g., Google AdWords), building an effective website, and converting clicks into purchases through an experiential learning approach. Prerequisite: MKTG 3301.

MKTG 4316. Marketing Management. 3 Semester Credit Hours.
Study strategic planning and management of all functional aspects of the marketing operation of an enterprise using comprehensive analytical methods and an integrated marketing mix. Prerequisite(s): Senior standing and 9 hours of MKTG.

MKTG 4340. Marketing Seminar. 3 Semester Credit Hours.
Examine the current issues/topics in Marketing. May be repeated for credit if the topic varies. Prerequisite(s): MKTG 3301, BUSI 3301 and permission of instructor.

MKTG 4354. International Marketing. 3 Semester Credit Hours.
Study comparative marketing systems, including economic, social, technological, governmental, and political environments as they affect international marketing operations. Prerequisite(s): MKTG 3301, BUSI 3301 and BUSI 3344 or permission of department chair.

MKTG 4356. Global Marketing Practices. 3 Semester Credit Hours.
Study basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities in a visited foreign country. A study abroad at the student's expense is required. Student may complete a maximum of six hours of SOBA sponsored study abroad toward degree completion. Field assignment fee: $75. Prerequisite(s): MKTG 3301, junior or senior standing and permission of instructor. BUSI 4354, MGMT 4356, or MKTG 4356 may not be taken concurrently.

MKTG 4384. Marketing Internship. 1-6 Semester Credit Hours.
Participate in a marketing-related position with a public or private business organization that is preapproved and supervised. Acquiring a new marketing-related position after approval of the internship or the approval of experiences beyond the scope of the student's present job. May be repeated for a total of 6 hours credit. Prerequisite(s): MKTG 3301, Faculty Sponsorship, and permission of department chair. Field experiences fee: $75.

MKTG 4388. Marketing Problems. 1-6 Semester Credit Hours.
Study of selected problems in marketing. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. May be repeated with permission of department chair. Prerequisite(s): Senior standing and permission of department chair.

MKTG 4389. Special Topics in Marketing. 3 Semester Credit Hours.
Examine current topics in marketing. Explore required readings from current marketing publications and other related periodicals. May be repeated for credit when topics vary. Prerequisite(s): 9 hours of MKTG.

MKTG 5308. Marketing Management. 3 Semester Credit Hours.
Study the planning and coordination of marketing functions specifically related to product, pricing, promotion, and distribution strategies. Explore case analysis and participate in presentation of results. Prerequisite(s): permission of department chair.

MKTG 5309. Marketing Strategy. 3 Semester Credit Hours.
Develop the role of product, pricing, promotion, and channel and physical distribution in the development of a firm's integrated marketing program. Study cases used to evaluate and compose alternative courses of action.

MKTG 5310. Integrated Marketing Communications. 3 Semester Credit Hours.
Study concepts associated with Integrated Marketing Communications (IMCs). Learn an experiential learning approach, wherein students apply the concepts learned in the classroom to the creation of an IMC campaign for an organization.

MKTG 5312. Brand Management. 3 Semester Credit Hours.
Learn branding, what it is, how it works, how it acquires and maintains economic and non-economic value. Explore the origins, power, theory, meaning, relevance and practice of brands, brand development, brand metrics and brand management though an experiential learning approach. Prerequisite(s): MKTG 5308 or permission of department chair.

MKTG 5315. International Marketing. 3 Semester Credit Hours.
Study comparative marketing systems, including economic, social, technological, governmental, and political environments as the affect international marketing operations. Students will be required to complete an extensive research project in addition to other course requirements.

MKTG 5340. Marketing Seminar. 3 Semester Credit Hours.
Explore selected marketing topics of current importance to business marketing. May be repeated once for credit when topics vary.

MKTG 5356. Global Marketing Practices. 3 Semester Credit Hours.
Study of basic international business concepts, cultural literacy, and discipline specific content applied to practical experiences and activities in the foreign county. A study abroad at the student’s expense is required. Graduate students will be required to complete an extensive research project in addition to other course requirements. Student may complete a maximum of six hours of COBA sponsored study abroad toward degree completion. Prerequisite(s) Course: Admission into a COBA graduate program and permission of instructor. Field experiences fee $75.

MKTG 5388. Marketing Problems. 1-3 Semester Credit Hours.
(Credit-variable) Study selected problems in marketing. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Prerequisite(s): Permission of department chair.
Marriage and Family therapy (MFT)

MFT 5090. Marriage and Family Therapy Theory Comprehensive Examination. 0 Semester Credit Hours.
Study and take the marriage and Family Therapy Theory examination for Non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis student do not take this examination.

MFT 5301. Introduction of Marriage and Family Therapy Theory. 3 Semester Credit Hours.
Explore the historical development, theoretical and empirical foundations of systems theory including a survey of the major models of marriage, couple and family therapy.

MFT 5302. Advanced Marriage and Family Therapy Theory. 3 Semester Credit Hours.
Examine contemporary therapeutic directions and core competencies in the field of marriage and family therapy.

MFT 5307. Ethics in Marriage and Family Therapy. 3 Semester Credit Hours.
Analyze ethical issues related to the profession and practice of Marriage and Family Therapy including the AAMFT Code of Ethics, professional identity, professional organizations and state licensure.

MFT 5309. Assessment and Treatment of Diverse Families. 3 Semester Credit Hours.
Learn the impact of diversity, power, and privilege as related to culture, class, ethnicity, gender, sexual identity, and religion in families and the influence of context on couple and family treatment. Assess the use of genograms and treatment will focus on effectively helping multi-stressed families.

MFT 5313. The Person of the Therapist Identification. 3 Semester Credit Hours.
Study identification and the development of the person as the therapist, which serves to hone skills in therapy.

MFT 5350. Marriage and Family Therapy Research Methods. 3 Semester Credit Hours.
Learn research methodology, data analysis and the evaluation of research in couple and family therapy. Study how research informs, Marriage and Family Therapy common factors, and evidence based practice.

MFT 5351. Diverse Couples Assessment and Treatment. 3 Semester Credit Hours.
Analyze theoretical models and skills necessary for effective treatment of couple relationship problems. Seminar format will offer training towards certification in Gottman Method Couples Therapy, as well as introduction to Emotion Focused Couples Therapy. Prerequisite(s): MFT 5301.

MFT 5352. Gender and Sexuality in Marriage and Family Therapy. 3 Semester Credit Hours.
Learn male and female sexual anatomy, and address male and female sexual problems and their treatment. Special Emphasis on sex therapy, including cultural diversity, age, disability and illness, sexual abuse and rape.

MFT 5353. Medical Family Therapy. 3 Semester Credit Hours.
Examine the role of the marriage and family therapist in larger behavioral health systems. Learn collaborative manner addressing the unique psychosocial problems of individuals, couples, and families with acute and chronic medically related concerns. Study principles of individual diagnosis of mental illness as defined in the DSM and the implications for systematically based treatment.

MFT 5355. Treating Military Families. 3 Semester Credit Hours.
Explore unique characteristics of military families and provide an overview of assessment and treatment options for common clinical concerns presented by military families.

MFT 5356. Combat Related Trauma. 3 Semester Credit Hours.
Explore the unique characteristics and symptoms of grief, PTSD and combat related trauma. Study systemic treatment options in order to help clients meet their treatment goals.

MFT 5357. Common Factors in Marriage and Family Therapy. 3 Semester Credit Hours.
Explore therapeutic relationship, client factors and hope/expectancy, and their implications for clinical practice.

MFT 5358. Group Process in Marriage and Family Therapy. 3 Semester Credit Hours.
Study human relationships in groups, particularly in the group therapy context. Explore the application of various aspects of group dynamics including leadership, motivation, perception, power and decision making.

MFT 5371. Advanced Couples Interventions. 3 Semester Credit Hours.
Study advanced skills and interventions in Gottman Method Couple Therapy and Emotion Focused Couple Therapy. Prerequisite(s): MFT 5301, MFT 5302 and MFT 5351.

MFT 5372. Relationship Education. 3 Semester Credit Hours.
Study multiple approaches to providing relationship education directly to couples and provides students the opportunity to prepare presentations that could be delivered in real-world settings. Prerequisite(s): MFT 5301, MFT 5302 and MFT 5351.

MFT 5380. Addiction in Marriage and Family Therapy. 3 Semester Credit Hours.
Study systemic framework for understanding addictions and how they impact the family system. Prerequisite(s): MFT 5301 and MFT 5302.

MFT 5381. Adolescent in Family Therapy. 3 Semester Credit Hours.
Explore marriage and family therapy theories in relation to treatment of various disorders in adolescence. Study relational, systemic, and contextual factors that are considered in and behavioral health systems which treat adolescents. Prerequisite(s): MFT 5301, MFT 5302 and PSYC 5304.

MFT 5382. Delinquency in Marriage and Family Therapy. 3 Semester Credit Hours.
Study juvenile delinquency and adolescent substance use through systemic and contextual lens. Examine and compare MFT theories related to juvenile delinquency and adolescent substance use. Prerequisite(s): MFT 5301, MFT 5302, PSYC 5304 and MFT 5381.

MFT 5383. Marriage and Family Therapy Pre-Practicum. 3 Semester Credit Hours.
Study interviewing and training skills in the Marriage and Family Therapy program while preparing for field placement. Gain an understanding of Marriage and Family Therapists, how clients change and basic therapeutic strategies. Explore basic skills and tools necessary to become competent clinicians. Use role playing, videotapes, and video cameras as part of the learning process. Prerequisite(s): MFT 5301.
MFT 5391. Clinical Practicum I. 3 Semester Credit Hours.
Gain experience in marriage and family therapy by providing therapy services in the on-campus clinic and additional approved practicum sites while under supervision of the Marriage and Family Therapy faculty. Demonstrate appropriate levels of competency, assessed through direct supervision, video supervision, as well as case conference, maintaining appropriate documentation of clinical work, and meeting clinical hours requirement as described in the departmental handbook. Prerequisite(s): MFT 5301, MFT 5307 and MFT 5383. Field experience fee - $75.

MFT 5392. Clinical Practicum II. 3 Semester Credit Hours.
Gain experience in marriage and family therapy by providing therapy services in the on-campus clinic and additional approved practicum sites while under supervision of the Marriage and Family Therapy faculty. Demonstrate appropriate levels of competency, assessed through direct supervision, video supervision, as well as case conference, maintaining appropriate documentation of clinical work, and meeting clinical hours requirement as described in the departmental handbook. Prerequisite(s): MFT 5301, MFT 5307, MFT 5383 and MFT 5391. Field experience fee - $75.

MFT 5393. Clinical Practicum III. 3 Semester Credit Hours.
Gain experience in marriage and family therapy by providing therapy services in the on-campus clinic and additional approved practicum sites while under supervision of the Marriage and Family Therapy faculty. Demonstrate appropriate levels of competency, assessed through direct supervision, video supervision, as well as case conference, maintaining appropriate documentation of clinical work, and meeting clinical hours requirement as described in the departmental handbook. Prerequisite(s): MFT 5301, MFT 5307, MFT 5383, MFT 5391 and MFT 5392. Field experience fee - $75.

MFT 5394. Clinical Practicum IV. 3 Semester Credit Hours.
Gain experience in marriage and family therapy by providing therapy services in the on-campus clinic and additional approved practicum sites while under supervision of the Marriage and Family Therapy faculty. Demonstrate appropriate levels of competency, assessed through direct supervision, video supervision, as well as case conference, maintaining appropriate documentation of clinical work, and meeting clinical hours requirement as described in the departmental handbook. Prerequisite(s): MFT 5301, MFT 5307, MFT 5383, MFT 5391, MFT 5392 and MFT 5393. Field experience fee - $75.

MATH 3301. Number Theory. 3 Semester Credit Hours.
The study of congruence relations, rational integers, diophantine equations, quadratic reciprocity law, linear forms, integral domains, and related topics. Prerequisite(s): 6 hours of MATH including MATH 2413.

MATH 3302. Principles of Geometry. 3 Semester Credit Hours.
Euclidean geometry topics including logic, properties of parallel lines, triangles, quadrilaterals, circles, measurement, similarity, proportionality, and transformations. Technology will be incorporated where appropriate. Credit for both MATH 3302 and MATH 4302 will not be awarded. Prerequisite(s): MATH 2413.

MATH 3303. Concepts of Elementary Math I. 3 Semester Credit Hours.
Problem solving, sets, functions, logic, elementary number theory, concepts of properties of whole numbers, rational numbers, integers, and real numbers. Designed for those planning to teach in elementary school. Prerequisite(s): MATH 1314 and Junior standing.

MATH 3305. Concepts of Elementary Math II. 3 Semester Credit Hours.
Basic concepts in algebra, geometry, calculators and computers, metric system and measurement, and probability and statistics. Meets basic probability requirement for math majors, certifying teachers, and interdisciplinary studies. Prerequisite(s): MATH 3303.

MATH 3306. Differential Equations. 3 Semester Credit Hours.
Solutions and applications of homogeneous and nonhomogeneous ordinary differential equations, including first-order equations and higher-order linear equations. Qualitative properties of solutions are investigated, as well as exact methods for solving differential equations and initial value problems including series, Laplace transform, separation of variables, variation of parameters, and undetermined coefficients. Prerequisite(s): MATH 2414.

MATH 3309. Algebraic Function. 3 Semester Credit Hours.
Survey of elements from Algebra, Trigonometry, Geometry, Probability and Statistics, Finite Mathematics, and Calculus. The class places a strong emphasis on real-world applications and interpretation. Technology will be incorporated where appropriate.

MATH 3310. Discrete Mathematics. 3 Semester Credit Hours.
Introduces students to the techniques and tools of reasoning, decision making, and combinational problem solving. Topics include sets and logic, combinations, probability, relations and functions, Boolean properties, and graph theory. Prerequisite(s): MATH 1314 or MATH 3309.

MATH 3311. Probability & Statistics I. 3 Semester Credit Hours.
This course contains the fundamentals of probability theory and the basics of statistics. Topics include probability axioms, sampling distributions, descriptive statistics, finite random variables, infinite discrete random variables, continuous random variables, and the Central Limit Theorem. Prerequisite(s): MATH 2414 and MATH 3305 or an elementary probability course.

MATH 3315. Mathematics & Technology. 3 Semester Credit Hours.
Use of current technologies related to creating interactive presentations/documents for math as well as use of current technologies related to mathematical analysis and state certification exams.

MATH 3332. Linear Algebra. 3 Semester Credit Hours.
A study of the theory of real vector spaces and linear transformations. Topics include vector spaces, inner product, norm, distance, subspaces, spanning sets, linear dependence and independence, bases, dimension, linear systems, coordinates, linear transformations, kernel, image, isomorphisms, inverse linear transformations, matrix representations of linear transformations, similarity, direct sums, and canonical forms. Prerequisite(s): MATH 2414.
MATH 3350. Principles of Bio-Statistics. 3 Semester Credit Hours.
An introduction to statistical methods that are applied in biology and agriculture. Use of technology and hands-on spreadsheet assignments are required in this course. Prerequisite(s): MATH 2413.

MATH 3360. Numerical Analysis I. 3 Semester Credit Hours.
An introduction to numerical analysis. Topics are being selected from error analysis, solving algebraic equations, interpolation, numerical differentiation and integration, methods for solving systems of equations, approximation theory, and initial value problems of ordinary differential equations. Prerequisite(s): MATH 2414 and 3 hours of COSC.

MATH 3370. An Introduction to Linear Programming. 3 Semester Credit Hours.
The topics will include Convexity, Extreme Points, Linear Programming for efficiency of mixtures, transportation, and other economic models. Basic analysis of the simplex method and duality will be used to solve such problems and to determine the long-term usefulness of models.

MATH 3375. An introduction to Partial Differential Equations. 3 Semester Credit Hours.
The topics will include advanced vector calculus, the heat and wave equations, separation of variables, Fourier Transforms, convolution, and geometric analysis. Prerequisite(s): MATH 2414 and PHYS 2425.

MATH 3433. Calculus III. 4 Semester Credit Hours.
The calculus of two dimensional vectors, parametric equations, cylindrical and spherical coordinates, multivariable differential calculus, directional derivatives and their applications, multiple integration, vector analysis, line and surface integrals, Green's Theorem, Stokes' Theorem. Use of computer technology and laboratory assignments will be required in this course. Prerequisite(s): MATH 2414.

MATH 4302. College Geometry. 3 Semester Credit Hours.
Euclidean geometry topics including logic, properties of parallel lines, triangles, quadrilaterals, circles, measurement, similarity, proportionality, and transformations. Additional topics include projective and non-Euclidean geometry. Technology is incorporated where appropriate. Substitutes for MATH 3302 for 4-8 certifying students. Prerequisite(s): MATH 2413.

MATH 4304. Survey of Mathematical Ideas. 3 Semester Credit Hours.
This course is designed to bring together and supplement the technical material of other mathematics courses to communicate mathematics effectively. Topics in algebra, trigonometry, geometry, statistics, and discrete mathematics will be explored. Technology will be used where appropriate. Prerequisite(s): MATH 2413 and MATH 3302 or MATH 4302 or concurrent registration.

MATH 4304L. Survey of Mathematical Ideas Lab. 1 Semester Credit Hour.
This lab is required for all math majors and must be taken with MATH 4304. This lab addresses and prepares students for content on the state certification exam and will reflect current state requirements for the mathematics state examinations for grade levels 7-12. All other majors requiring MATH 4304 will continue to take base course, but will not take this lab. Prerequisites: MATH 2413 and MATH 3302 or MATH 4302 or concurrent registration and Senior Standing.

MATH 4305. Concepts of Elem Math III. 3 Semester Credit Hours.
This course is designed to develop and extend the mathematical content knowledge of prospective middle school teachers. Topics include the development of algebraic reasoning through the use of patterns, relations, and functions with an emphasis on multiple representations (numerical, graphical, verbal, and/or symbolic). Technology is being integrated into the curriculum where appropriate. Prerequisite(s): MATH 3305 for EC-6 and 4-8 Mathematics majors; MATH 2413 for all other students.

MATH 4307. Complex Analysis. 3 Semester Credit Hours.
A first course in complex analysis which involves learning the arithmetic/geometry of the complex number field; calculus of functions of a complex variable, analytic and harmonic functions; residue theory. The course also includes an introduction to conformal mappings and boundary value problems.

MATH 4309. Advanced Analysis I. 3 Semester Credit Hours.
(WI) A study of the theory of the calculus of functions of a single variable. Topics include the topology of the real line, functions, sequences and their limits, continuity, differentiation, and integration. Prerequisite(s): MATH 2414.

MATH 4311. Probability & Statistics II. 3 Semester Credit Hours.
Continuation of MATH 3311 with focus on statistical inference. Topics include the Central Limit Theorem, sampling distributions, confidence intervals, hypothesis testing, inferences based on two samples, and an introduction to ANOVA. Prerequisite(s): MATH 3311.

MATH 4320. Mathematical Modeling. 3 Semester Credit Hours.
An advanced introduction to models related to applied sciences. Topics include applications of linear programming, scheduling, graph theory, and game theory. Prerequisite(s): MATH 2414 and 6 hours of advanced mathematics or pre-calculus.

MATH 4332. Abstract Algebra. 3 Semester Credit Hours.
(WI) An introduction to abstract algebraic structures, including groups, rings, ideals, polynomial rings, and applications. Prerequisite(s): MATH 3332.

MATH 4380. Undergraduate Research Project. 1-3 Semester Credit Hours.
Methods of research in the mathematical sciences or in mathematics education through a research project directed by a departmental faculty member. The student is required to prepare a final report and presentation. No credit is earned until the student has enrolled in at least 3 credit hours, and the final report and presentation are certified as completed by the faculty member directing the project, at which time the student will receive 3 credit hours. Prerequisite(s): Mathematics major, senior standing, and 24 semester hours of MATH courses and permission of department chair.

MATH 4389. Special Topics in Math. 3 Semester Credit Hours.
Topics are being selected from areas of mathematics suitable for upper level study. This course may be repeated once with permission of department chair, as topics change. Prerequisite(s): MATH 2414 and 6 hours of advanced MATH.

MATH 4488. Mathematic Problems. 1-4 Semester Credit Hours.
Special problems in mathematics. Not covered by any course in the curriculum. Work may be either theory or laboratory. May be repeated with permission of department chair for additional credit when fewer than four credits have been earned. Prerequisite(s): Permission of department chair.
MATH 5090. Comprehensive Examination. 0 Semester Credit Hours.
Non-thesis students should register for the comprehensive examination during their final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis student do not take this examination.

MATH 5198. Thesis. 1-6 Semester Credit Hours.
Scheduled when the student’s committee chair determines the student is ready to begin the thesis. No credit is earned until the student has enrolled in at least 6 credit hours of thesis and the thesis is certified as completed by the student’s committee, at which time the student will be awarded 6 credit hours of thesis.

MATH 5301. Nonparametric Statistics. 3 Semester Credit Hours.
Introduction to nonparametric statistics. Topics will include hypothesis testing, contingency tables, rank tests, and goodness-of-fit tests. Prerequisite(s): MATH 3300 or MATH 3111 or MATH 3450 or MATH 5305.

MATH 5302. Financial Mathematics I. 3 Semester Credit Hours.
A thorough review of the mathematics related to calculating present and accumulated values for various streams of cash flows, with applications to: reserving, valuation, pricing, asset/liability management, investment income, capital budgeting, and valuing contingent cash flows. This class (together with Financial Mathematics 2) is intended to provide sufficient background for the student to succeed in passing the Actuarial FM exam.

MATH 5305. Probability & Statistics. 3 Semester Credit Hours.
Topics will be selected from: distributions and stochastic processes, parametric and nonparametric statistics, and time series analysis. Prerequisite(s): MATH 3111.

MATH 5306. Dynamical Systems. 3 Semester Credit Hours.
Advanced study of dynamical systems. Topics will be selected from discrete and continuous dynamical systems, sensitivity analysis, models of the physical, life, and social sciences, and bifurcation analysis. Prerequisite(s): MATH 3306 and MATH 3332.

MATH 5308. Abstract Algebra. 3 Semester Credit Hours.
Topics will be selected from: groups, homomorphism, isomorphism, direct products and sums, invariant properties, rings, and fields. Prerequisite(s): MATH 4332.

MATH 5309. Complex Variables. 3 Semester Credit Hours.
An introduction to complex analysis. Topics will be selected from elementary operations and analytic functions, curves and integrals, power series, Cauchy’s theorem, zeroes and singularities of analytic functions, Laurent series, maximum principle, analytic continuation, harmonic functions, conformal mapping and transformations. Prerequisite(s): MATH 3433.

MATH 5311. Operations Research. 3 Semester Credit Hours.
This course examines the theoretical support and applications of the simplex algorithm for linear programming and for dynamic programming. Transportation and scheduling problems are among the applications to be emphasized. Prerequisite(s): MATH 3332.

MATH 5312. Design of Experiments. 3 Semester Credit Hours.
Students will learn about planning and conducting an experiment. Data analysis using appropriate software is covered. Prerequisite(s): MATH 5305 or permission of department chair.

MATH 5315. Operations Research II. 3 Semester Credit Hours.
Selected topics in Operations Research, chosen from the following: Search, Selection and Optimization Techniques; System Modeling; Network Analysis; Inventory and Production Modeling; Sequencing and Scheduling; Decision Theory; Queuing Theory; Simulation and Monte Carlo Techniques; and Markov Chains.

MATH 5320. Real Analysis. 3 Semester Credit Hours.
Topics will be chosen from: sets and operators; cardinal numbers and ordinal types; metric spaces and Lebesgue measure; metric properties of sets; differentiation and integration. Prerequisite(s): MATH 4309.

MATH 5325. Real Analysis II. 3 Semester Credit Hours.
Completeness properties of the real number system. Topology of the real line. Introduction to Lebesgue measure and integral. Convergence of sequences.

MATH 5330. Mathematical Modeling. 3 Semester Credit Hours.
An advanced course in mathematical modeling. Topics will be selected from scaling, dimensional analysis, regular and singular perturbation theory, stability theory, and asymptotic analysis. Prerequisite(s): MATH 3306 and MATH 3332.

MATH 5335. Statistics II. 3 Semester Credit Hours.
This is an advanced course in probability distributions, joining distributions, covariance and problems related to the actuary field. Prerequisite(s): MATH 5305.

MATH 5340. Topology. 3 Semester Credit Hours.
An introduction to point set topology. Topics will include open and closed sets, interior, closure, boundary, neighborhoods, continuous functions, separation and subspaces. Additional topics will be selected from compactness, connectedness and continua. Prerequisite(s): MATH 4309.

MATH 5345. Financial Mathematics II. 3 Semester Credit Hours.
A mathematical introduction to financial instruments, including derivatives, and the concept of no-arbitrage as it relates to financial mathematics. This class (together with Financial Mathematics 1) is intended to provide sufficient background for the student to succeed in passing the Actuarial FM exam.

MATH 5350. Applied Linear Algebra. 3 Semester Credit Hours.
An advanced course in linear algebra. Topics to be selected from linear spaces and operators, canonical forms, quadratic forms and optimization, computation and condition, and compatible systems. Prerequisite(s): MATH 3332.

MATH 5360. Numerical Analysis. 3 Semester Credit Hours.
An advanced study of numerical analysis. Topics will be selected from linear systems, approximation theory, numerical differential and integral equations, integration theory. Prerequisite(s): MATH 4309 and MATH 3360 or 6 hours of COSC.

MATH 5375. Statistical Reasoning and Probability. 3 Semester Credit Hours.
Topics in applied statistics including ANOVA, experimental design, single and multiple linear regression, hypothesis testing of linear models, forecast errors and confidence intervals. Prerequisite(s): MATH 3311 or equivalent.

MATH 5376. Topics in Secondary Math. 3 Semester Credit Hours.
This course applies the standards of the National Council of Teachers of Mathematics to the curriculum of secondary mathematics. It explores techniques to implement the standards through the use of manipulatives, graphing handhelds, and computer technology. Prerequisite(s): 24 hours of MATH, including MATH 2413.

MATH 5378. Technology-Aided Mathematics. 3 Semester Credit Hours.
Students will engage in mathematical problem-solving using technological tools. Technologies may include graphing handhelds, data collection devices, computer software packages, and internet resources. This course may be repeated for credit as the topic changes. Prerequisite(s): 24 hours of MATH, including MATH 120.
MATH 5379. Topics In Mathematics Theory. 3 Semester Credit Hours.
An examination of topics in mathematical theory appropriate for secondary mathematics educators. Topics will be selected from geometry and topology, number theory, modern algebra, and library research in mathematics. This course may be repeated for credit as the topic changes. Prerequisite(s): Permission of department chair.

MATH 5380. Selected Topics in Mathematics. 3 Semester Credit Hours.
An examination of topics in applied mathematics. Topics for study will be selected from advanced mathematical modeling, advanced numerical techniques, practical optimizations, calculus of variations, dynamic programming, integral equations, optimal control, perturbation methods, and library research in applied mathematics. This course may be repeated for credit as the topic changes. Prerequisite(s): Permission of department chair.

MATH 5381. Research Analysis. 1 Semester Credit Hour.
An overview of the components of research in the main areas of mathematics. These areas will include pure mathematics and statics, applied mathematics and statistics, and mathematics education. The course will culminate with a study of what is a proper literary review and how to submit an article for publication. Prerequisite(s): Graduate standing in the mathematics department or permission of department chair.

MATH 5389. Advanced Special Problems. 1-3 Semester Credit Hours.
Special problems in mathematics. Work may be either theory or laboratory. May be repeated with permission of the department chair for additional credit when fewer than four credits have been earned. Prerequisite(s): Permission of department chair.

Military Science (MILS)

MILS 3301. Training Mgmt & Warfight Funct. 3 Semester Credit Hours.
This course is designed to enable a student with no prior military or cadet experience to quickly learn essential cadet knowledge and skills. The course introduces the principles of physical fitness, healthy lifestyles and the Leader Development Program that will be used to evaluate leadership performance and provides cadets with developmental feedback, used throughout the year. Cadets learn how to plan and conduct individual and small unit training, as well as basic tactical principles. The course conducts a four-week study of reasoning skills and the military-specified application of these skills in the form of the Army's troop leading procedures. The final four weeks examines officership. This course serves as the first and primary course of the ROTC Advanced Courses.

MILS 3302. Leadership in Small Unit Ops. 3 Semester Credit Hours.
This course is designed to continue the development of cadets as leaders by presenting instructions in the areas of leadership, interpersonal communications, values and ethics. The leadership module expands on key leadership concepts and provides feedback for cadet leadership self-development efforts. Interpersonal communications lessons address general communication theory as well as written and spoken communication skills. The highlight of the communication module is the opportunity for cadets to present an information briefing and receive feedback from both instructor and fellow students.

MILS 4301. The Army Officer. 3 Semester Credit Hours.
This course concentrates on Army operations and training management, communications and leadership skills and supports the beginning of the final transition from cadet to lieutenant. The course enables cadets to attain knowledge and proficiency in several critical areas needed to operate effectively as an Army officer. These subjects have the added benefit of preparing cadets to lead the cadet battalion throughout the remainder of the year. At the end of this semester, cadets possess the fundamental skills, attributes, and abilities required to operate as competent leaders in the cadet battalion.

MILS 4302. Company Grade Leadership. 3 Semester Credit Hours.
The final semester course of the MS IV year trains cadets on Military Law, task organizations, maintenance, supply management, and physical training. Cadets conduct a Capstone Practical Exercise, assuming leadership roles as a lieutenant entering a new unit. The course is designed to prepare transition and groom senior cadets to become Army Officers.

MILS 4305. Intro to Cross Cultural Learn. 3 Semester Credit Hours.
The course enables students to contribute to a local society beyond the University setting. This course is a series of cultural immersion trips sponsored by the US Army Cadet Command over a 29 day period, usually during the summer semester. Prerequisite(s): ROTC cadets accepted into the ROTC program, MILS 3301 and MILS 3302.

MILS 4389. Special Topics. 1-6 Semester Credit Hours.
A course open to Military Science students. Topics vary according to student need. May be repeated for a maximum of 6 hours. Open to students of junior or senior standing. Prerequisite(s): Permission of department chair.

Music (MUSI)

MUSI 3129. Intermediate & Advanced Band Repertoire. 1 Semester Credit Hour.
This course focuses increasing knowledge and awareness of the importance of selecting appropriate concert band literature for the contest and concert stage. In addition there will be an emphasis on improving the skills needed to plan, conduct and rehearse instrumental ensembles of a variety of levels.

MUSI 3130. Intermediate & Advanced Orchestra Repertoire. 1 Semester Credit Hour.
This course focuses increasing knowledge and awareness of the importance of selecting appropriate concert orchestra literature for the contest and concert stage. In addition there will be an emphasis on improving the skills needed to plan, conduct and rehearse instrumental ensembles of a variety of levels.

MUSI 3133. Woodwind Class. 1 Semester Credit Hour.
This course is designed to facilitate the development of skills, techniques, understandings, and professional dispositions which are necessary for teaching others to play woodwind instruments.

MUSI 3134. Brass Class. 1 Semester Credit Hour.
This course focuses on the basics of musical performance with special attention to rhythm, tone quality, range, musical phrasing, intonation and style, from different stylistic periods, in a variety of key signatures and meter signatures.
MUSI 3135. Vocal Class (Instrumental Majors). 1 Semester Credit Hour.
This course serves an introduction to singing for instrumentalists who
need a pedagogical knowledge for future work with singers or choirs.
Instruction will include work on anatomy of the voice, breathing, posture,
resonance, diction, repertoire and vocal health. In addition to accessing
voices for choral and/or private lesson for singing students.

MUSI 3137. Percussion. 1 Semester Credit Hour.
This course is designed to facilitate the development of skills, techniques,
understandings, and professional dispositions which are necessary for
choral leadership. This course is designed to prepare prospective choral
leaders, public school or secular group, in both musical and non-musical
aspects of being a choral teacher.

MUSI 3138. String Class. 1 Semester Credit Hour.
This course is designed to facilitate the development of skills, techniques,
understandings, and professional dispositions which are necessary for
teaching others to play stringed instruments.

MUSI 3161. Diction for Singers. 1 Semester Credit Hour.
This class will study the proper pronunciations for lyrics of English,
Italian, German, and French musical literature. The student is expected to
effectively apply these guidelines in their own speech and singing.

MUSI 3162. Opera Workshop. 1 Semester Credit Hour.
This focuses on the organization and staging of standard operas and
operettas. May be repeated. Fall (opera), spring (musical).

MUSI 3259. Choral Repertoire. 2 Semester Credit Hours.
This course focuses on the analysis of tonality, harmony and form
in European music of the 18th and 19th centuries. Includes aural
recognition of forms.

MUSI 3263. Form & Analysis. 2 Semester Credit Hours.
Analysis of tonality, harmony and form in European music of the 18th and
19th centuries. Includes aural recognition of forms. Prerequisite(s): MUSI
2115, MUSI 2117 and MUSI 2312.

MUSI 3264. Orchestration. 2 Semester Credit Hours.
This course covers the fundamentals of instrumentation and arranging
music for instruments and vocalists in a variety of musical performance
settings.

MUSI 3313. Music Appreciation. 3 Semester Credit Hours.
This course provides opportunities to become familiar with the basic
elements of music. Emphasis is on learning to listen to music and on the
role it plays within the wider contexts of history and society. Listening
materials are drawn from a variety of sources: classical music, non-
Western music, American popular music (particularly jazz, country, and
rock), and the American folk tradition.

MUSI 3324. Popular Music in America. 3 Semester Credit Hours.
An introductory study of popular music in the U.S., emphasizing
development and application of analytic skills oriented toward the
popular arts. Concert attendance and listening requirements.

MUSI 3343. Computer Assisted Electronic Music. 3 Semester Credit Hours.
This course focuses on the use of microcomputers in generation and
control of electronic music. Study of one or more commonly available
microcomputer programs for MIDI application. Includes technology for
music teachers.

MUSI 4095. Senior Recital. 0 Semester Credit Hours.
Senior Recital is a course in which the student prepares for and performs
in their senior recital.

MUSI 4098. Senior Recital. 0 Semester Credit Hours.
Senior Recital is a course in which the student prepares for and performs
in their senior recital.

MUAP 3269. Private Lesson Instruction V. 2 Semester Credit Hours.
This course is designed to provide individualized instruction in solo
technique and repertoire for the musical performer. Prerequisite: 4
semesters of private instruction.

MUAP 3270. Private Lesson Instruction VI. 2 Semester Credit Hours.
This course is designed to provide individualized instruction in solo
technique and repertoire for the musical performer. Prerequisite: 5
semesters of private instruction.

MUAP 4269. Private Lesson Instruction VII. 2 Semester Credit Hours.
This course is designed to provide individualized instruction in solo
technique and repertoire for the musical performer. Prerequisite: 6 hours
of private instruction.

MUAP 4270. Private Lesson Instruction VIII. 2 Semester Credit Hours.
This course is designed to provide individualized instruction in solo
technique and repertoire for the musical performer. Prerequisite: 7
semesters of private instruction; Corequisite: MUSI 4098 (Senior Recital)
required.

Music - Applied (MUAP)

MUEN 3121. Symphonic Band. 1 Semester Credit Hour.
Rehearsal and performance of quality concert band literature from a
variety of styles. Open to any student by audition only.

MUEN 3123. Orchestra. 1 Semester Credit Hour.
Rehearsal and performance of quality orchestral literature from a variety
of styles. Open to any student by audition only.
MUEN 3124. Jazz Ensemble. 1 Semester Credit Hour.
Rehearsal and performance of quality jazz ensemble literature from a variety of styles. Open to any student by audition only.

MUEN 3142. Chorale. 1 Semester Credit Hour.
Designed to give participants a challenging, stylized choral experience. Performs a wide variety of literature, emphasizing the more difficult choral works. Open to any student by audition.

Nursing (NURS)

NURS 3300. Professional Role Transitions. 3 Semester Credit Hours.
(WI) Apply critical thinking skills to examine personal and professional growth, the nurse’s role in professional practice, and philosophies of professional nursing. Nursing theories, the foundations of professional nursing practice, are examined. The concepts of nursing informatics are explored as they interface with ethics, cultural competency, and health promotion concepts. These explorations are accomplished utilizing communication technologies such as, learning management systems, the Internet, library electronic databases, and online seminars. Information technology resources are employed for students to demonstrate skills in electronic communications that are essential to professional nursing practice and that require basic competencies in nursing informatics.

NURS 3304. Nursing Research. 3 Semester Credit Hours.
(WI) This course is a study of basic research methodologies and an examination of the professional nurse’s role in evidence-based practice. Students employ high level critical thinking and informatics skills to explore, identify, and critically appraise the credibility of Internet sources and library electronic databases to gather relevant evidence across professions that answer questions about nursing practice. Through this examination, students increase their awareness of the impact of culture and ethics on the research process and evidence-based practice.

NURS 3307. Health Assessment. 3 Semester Credit Hours.
In this course, the concepts and principles underlying the assessment of the health status of culturally diverse individuals are presented. Emphasis is placed on reviewing and renewing cognitive, affective, and psychomotor skills to obtain health histories and discover physical and psychosocial findings in the well person. Emphasis is placed on health assessment as a systematic and organized examination that will provide accurate data to form valid nursing diagnoses and plans of care. Practicum experiences allow students to enhance comprehensive health assessment and analysis skills. Prerequisite(s): NURS 3300.

NURS 3317. Pathophysiology for the Registered Nurse. 3 Semester Credit Hours.
The focus of this course is to understand the pathophysiological basis for disease processes in adults and children. Central concepts will address symptoms, treatment, and prognosis. The major direction of this course will be on clinical application of findings that underlie pathogenesis and provide a basis for evidence-based practice. The course is specifically designed to meet the needs of nursing students.

NURS 3330. Nursing Care of Older Adults. 3 Semester Credit Hours.
In this course the aging process will be examined with a focus on risk reduction and disease prevention in the older adult. The concept of healthy aging will be explored. Strategies for health promotion, restoration, and maintenance of the older adult will be examined. Expected professional nurse competencies in providing and directing culturally sensitive care of the older adult across the wellness/illness continuum will be emphasized. Prerequisite(s): NURS 3300.

NURS 4212. Professional Issues for the Registered Nurse. 2 Semester Credit Hours.
This course provides opportunities for analysis of elements that reflect the progressive development of the role of the professional nurse. It formalizes a framework that integrates the issues of political action, socio-legal concerns, multiculturalism, and ethical models into nursing practice through the debate process. Prerequisite(s): NURS 3300.

NURS 4405. Care of Individuals and Families. 4 Semester Credit Hours.
This course emphasizes the importance of the professional nurse’s engagement in ethical and evidence-based practice. Students examine nursing case management concepts as they apply critical thinking skills to integrate the concepts of pathophysiology, pharmacology, psychosocial behavior, and cultural competence to coordinate quality and safe care in a variety of settings. Students experience the nurse educator role as they employ teaching and learning principles and nursing informatics to initiate interventions with individuals and families that highlight health promotion activities. Practicum experiences are individualized. Prerequisite(s): NURS 3300.

NURS 4410. Leadership and Management for the Registered Nurse. 4 Semester Credit Hours.
In this course, theories and principles of human behavior in organizations are examined, including an exploration of leadership roles in professional nursing practice. Students analyze concepts that reflect the progressive development of the nurse leader who applies critical thinking and information technology skills to evidence-based practice. The role of the nurse leader as an inter-professional team member is also examined. The importance of the nurse leader as a role model for continued professional growth through lifelong learning is emphasized. Issues related to political action, socio-legal concerns, cultural diversity, and ethics in professional nursing practice are explored with an emphasis on the advocacy role of the nurse. Practicum experiences are individualized. Prerequisite(s): NURS 3300.

NURS 4506. Community Health. 5 Semester Credit Hours.
In this course, students are introduced to public/community health nursing practice and the role of systems in the care of culturally diverse populations. The role of the professional nurse as part of an inter-professional team in health promotion, disease prevention, and management of chronic health problems in community settings is explored. Students apply critical thinking and information technology skills to develop and implement evidence-based projects that positively impact the quality of life of identified populations. Practicum experiences are individualized. Prerequisite(s): NURS 3300.

Physics (PHYS)

PHYS 3331. Mechanics. 3 Semester Credit Hours.
Particle dynamics in one, two, and three dimensions; conservation laws; dynamics of a system of particles; motion of rigid bodies; central force problems. Prerequisite(s): MATH 3306 and MATH 3433; or concurrent registration.

PHYS 3332. Electromagnetic Field Theory. 3 Semester Credit Hours.
Electrostatics; Laplace’s equation; the theory of dielectrics; magneto static fields; electromagnetic induction; magnetic fields of currents; Maxwell’s equations. Prerequisite(s): PHYS 2426 and MATH 3306 or concurrent registration; MATH 3433 or concurrent registration.

PHYS 3333. Thermodynamics. 3 Semester Credit Hours.
Concept of temperature, equations of state; the first and second law of thermodynamics; entropy; change of phase; the thermodynamics functions. Prerequisite(s): PHYS 2426; MATH 3433 or concurrent registration.
PHYS 3334. Modern Physics. 3 Semester Credit Hours.
Foundations of the atomic theory of matter; kinetic theory; elementary particles; radiations; atomic model; atomic structure; atomic spectra and energy levels; quantum theory of radiation; x-rays; special theory of relativity. Prerequisite(s): PHYS 2426 and MATH 3433, or MATH 3306 or concurrent registration.

PHYS 3350. Medical Physics I. 3 Semester Credit Hours.
The course will provide an introduction to the physics of human physiological processes as well as the physics used in the design of medical diagnostic tools and techniques. Prerequisite(s): PHYS 2426 or consent of the instructor.

PHYS 4170. Undergraduate Research Project. 1-2 Semester Credit Hours.
Methods of research in physics or in physics education through a research project directed by a departmental faculty member. The student is required to prepare a final report and presentation. No credit is earned until the student has enrolled in at least 2 credit hours and the final report and presentation are certified as completed by the faculty member directing the project, at which time the student will receive 2 credit hours. Prerequisite(s): junior standing and 14 semester hours of PHYS.

PHYS 4330. Mathematical Methods of Phys. 3 Semester Credit Hours.
Mathematical techniques from the following areas: infinite series; integral transforming; applications of complex variables; vectors, matrices, and tensors; special functions; partial differential equations; Green's functions; perturbation theory; integral equations; calculus of variations; and groups and group representatives. Prerequisite(s): MATH 3306 and MATH 3433.

PHYS 4335. Quantum Physics. 3 Semester Credit Hours.
The Schrodinger equation; one dimensional systems; the Heisenberg uncertainty principle; magnetic moments and angular momentum; two and three dimensional systems; approximation methods; scattering theory. Prerequisite(s): PHYS 3334 and MATH 3306.

Political Science (POLI)

POLI 3301. Political Economy of Globalization. 3 Semester Credit Hours.
Examine the demographic, technological, and economic forces that have come together to shape a more culturally, economically, and politically integrated world, and the hard political and economic choices that must be made in competitive environments.

POLI 3302. Elections and Political Parties. 3 Semester Credit Hours.
Study electoral process in American national, state, and local political systems. Special emphasis on the evolution of the structure and functions of political parties, and other participants in the electoral process.

POLI 3303. Comparative State and Local Government. 3 Semester Credit Hours.
Explore variations and similarities in the practice of politics and in the administration of government in the states. Special Emphasis on local government and state-national relations. Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 3304. The Executive Branch. 3 Semester Credit Hours.
Examine the organization of executive power in the United States national, state, and local government systems. Evolution of the structure and functions of the Presidency, national, state and local bureaucracies, the role of parties, legislatures, courts, and interest groups are analyzed as participants in the executive process. Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 3305. Legislation. 3 Semester Credit Hours.
Examine the legislative process in American national, state, and local political systems. Analyze the evolution of the structure and functions of the Congress and the state legislatures, and the role of executives, courts, parties, interest groups, and other participants in the legislative process. Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 3306. Political Economy. 3 Semester Credit Hours.
Explore the historical, philosophical, and theoretical relationships between the state and the economy. Prerequisite(s): None.

POLI 3307. Public Administration. 3 Semester Credit Hours.
Examine the concepts and practices of American public administration. Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 3308. International Politics. 3 Semester Credit Hours.
(WI) Explore the development of the national state system, the problems and issues which have arisen, international agencies created to cope with these problems, and the principles of international conduct.

POLI 3310. Environmental Politics. 3 Semester Credit Hours.
Explore the politics of environmental protection in America. Special emphasis on domestic environmental policy and the affects of federalism in shaping and implementing environmental policies. Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 3320. Terrorism and Political Violence. 3 Semester Credit Hours.
Examine the causes of terrorism and other forms of political violence, with special emphasis on measures of prevention and counter-terrorism.

POLI 3330. Understanding Social Science Research. 3 Semester Credit Hours.
(WI) Develop skills in political science research, with emphasis on hypothesis testing, measurement, formal modeling, and statistical analysis. Statistical concepts covered include central tendencies and statistical distributions, regression, and maximum likelihood estimation.

POLI 3335. Religion and Politics. 3 Semester Credit Hours.
Explore the historic development of church-state relations in the United States, the evolution of church-state constitutional law, and the impact of this history and law on the current political environment. Special Emphasis on the role played by religion in political campaigns, local politics, and interest group activities.

POLI 4301. Constitutional Law I. 3 Semester Credit Hours.
Examine the origin and growth of the constitutional aspects of national power as shown by leading U.S. Supreme Court decisions on commerce, federalism, jurisdiction, money, monopolies, treaties, and war. Prerequisite(s): GOVT 2305, GOVT 2306, HIST 1301, HIST 1302.

POLI 4302. Constitutional Law II. 3 Semester Credit Hours.
Examine the origin and development of constitutional prohibitions as shown by leading US Supreme Court decisions on civil rights, contracts, due process, economic regulation, eminent domain, labor relations, obscenity, political utterance, and religion. Prerequisite(s): POLI 4301.

POLI 4303. Political Theory through 1789. 3 Semester Credit Hours.
Philosophical ideas concerning basic political problems from the Greeks to 1789. Prerequisite(s): GOVT 2305, GOVT 2306.
POLI 4304. Political Theory Since 1789. 3 Semester Credit Hours.
Philosophical ideas concerning basic political problems since 1789.
Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 4305. Comparative Government and Politics. 3 Semester Credit Hours.
Examine the relationship of government and politics of the major world powers, including topics from Asia, Africa, Europe, and the Americas.

POLI 4310. Environmental Policy. 3 Semester Credit Hours.
Examine the politics of environmental protection worldwide. Special emphasis on international environmental policy and agreements and treaties made by nations to shape and implement environmental policy. Prerequisite(s): GOVT 2305, GOVT 2306.

POLI 4315. Foreign Policy. 3 Semester Credit Hours.
Study America's role in the modern world. Particular emphasis is placed on the policy makers, and on external and internal factors which affect decision making.

POLI 4316. Conflict Studies. 3 Semester Credit Hours.
Study the causes of international and civil conflict, historical changes in the nature of war, and predictions of future conflicts.

POLI 4317. Peace Studies. 3 Semester Credit Hours.
Explore the causes of peace, covering bargaining and war termination, social conflict resolution, international cooperation, and the ethics of peace.

POLI 4320. Weapons of Mass Destruction. 3 Semester Credit Hours.
Examine the physical and political effects of chemical, biological, and nuclear weapons, with emphasis on issues of deterrence and arms control.

POLI 4321. Civil Wars and Military Intervention. 3 Semester Credit Hours.
Examine the causes, characteristics, and effects of civil wars, with particular emphasis on preventing the resumption of warfare after peace agreements, and the effect of military intervention on the outcome and recurrence of civil war.

POLI 4340. Political Ethics. 3 Semester Credit Hours.
Compare theories of political ethics from ancient times to the present. Special attention is given to the topics of justice and virtue.

POLI 4341. Freedom and Authority. 3 Semester Credit Hours.
Examine the legitimacy of government and the sources of individual rights. Special attention is given to the idea of a "social contract," restraints on government, arguments for and against restricting liberty, and who should be permitted to participate in politics.

POLI 4350. Government Seminar. 3 Semester Credit Hours.
Explore topics in government with independent reading, research, discussion, and writing, under personal direction of instructor. May be taken more than once for credit. Prerequisite(s): Senior standing, 18 hours of POLI, or permission of Program Coordinator.

POLI 4380. Administration of Justice. 3 Semester Credit Hours.
Analyze the structure, function, and interrelationship of the components of the criminal justice system at the federal, state, and local levels, including the history and philosophy of criminal justice in a democratic society.

POLI 4384. Political Science Internship. 3,6 Semester Credit Hours.
Apply and integrate academic study with professional experience in Political Science. Field projects include direction of a political campaign, internship in a city or county administrative office, or in a not-for-profit organization for analyzing or carrying out governmental policy. Minimum of 160 hours of work required for 3 hours of credit. Prerequisite(s): 2.5 overall grade point average, senior standing, and permission of Program Coordinator. Field experience fee $75.

POLI 4388. Political Science Problems. 1-3 Semester Credit Hours.
Explore problems in Political Science with independent reading, research and discussion. Entry into this course will be arranged with the political science advisor and instructor.

POLI 4395. Political Science Capstone. 3 Semester Credit Hours.
(WI) Integrate and use fundamental concepts learned in previous political science courses to research and analyze real-world political phenomena and problems. Students present oral and written reports on their research, supplemented by appropriate internet and multimedia materials, as well as portfolios documenting their research.

POLI 5300. Political Science Research Methods. 3 Semester Credit Hours.
Learn the elements of research design and statistical analysis. Topics covered include hypothesis-testing, reliability and validity, measures of association, linear regression, and maximum likelihood estimation.

POLI 5301. Political Decision-Making. 3 Semester Credit Hours.
Learn formal models of political decision-making, including game theory, spatial voting models, decision theory, and collective social choice.

POLI 5302. Constitutional Law. 3 Semester Credit Hours.
Predict the resolution of constitutional controversies by examining theories of constitutional interpretation and judicial decision-making in the United States.

POLI 5303. Origins of Conservative Political Thought. 3 Semester Credit Hours.
This course covers the philosophical origins of conservative political thought, focusing on its traditional, statist, and libertarian variants.

POLI 5304. Political Liberalism and its Critics. 3 Semester Credit Hours.
Explore the philosophical assumptions and implications of liberalism, and examine its internal consistency and the extent to which it withstands challenges from competing systems of political thought.

POLI 5305. American Politics. 3 Semester Credit Hours.
Examine basic approaches to the study of American Politics, including major works and recent research on this topic.

POLI 5306. Comparative Politics. 3 Semester Credit Hours.
Examine basic approaches, major works, and recent research on the study of comparative politics and government.

POLI 5307. International Relations. 3 Semester Credit Hours.
Examine basic approaches to the study of the politics of international relations, including major works and recent research on the topic.
POLI 5315. Foreign Policy. 3 Semester Credit Hours.
Learn foreign policy decision-making. Understand how decisions are made, their consequences, and their ethical implications, with special emphasis on the foreign policy decisions of the United States.

POLI 5316. Conflict Studies. 3 Semester Credit Hours.
Study the causes of international and civil conflict, historical changes in the nature of war, and predictions of future armed conflicts.

POLI 5317. Peace Studies. 3 Semester Credit Hours.
Study the causes of peace, covering bargaining and war termination, social conflict resolution, international cooperation, and the ethics of peace.

POLI 5318. Terrorism Studies. 3 Semester Credit Hours.
Study the causes of terrorism and other forms of political violence, with particular emphasis on measures of prevention and counter-terrorism.

POLI 5321. Civil Wars. 3 Semester Credit Hours.
Examine the onset, evolution, and termination of civil wars. Particular emphasis is given to the role that outside actors play in civil wars, including foreign military intervention.

POLI 5330. Theories of Public Management. 3 Semester Credit Hours.
Apply theories of public administration, and study the problems of administrative management in public organizations, and the use of law for administrative decision-making.

POLI 5350. Political Forecasting. 3 Semester Credit Hours.
Research and analyze real-world political phenomena and problems. Learn and use different approaches to political forecasting, with a focus on formal models of politics.

POLI 5352. General Wars in World History. 3 Semester Credit Hours.
Assess theories of war between major powers. Attention is given to structural, economic, and military factors that contribute to world wars, as well as the prospects for a Third World War.

POLI 5355. International Relations of the Middle East. 3 Semester Credit Hours.
Examine the international politics of the Middle East, with particular emphasis on Israel and its regional rivals.

POLI 5360. Political Culture and Public Policy. 3 Semester Credit Hours.
Study the political culture as it forms and is formed by public policy, including the culture of environmental policy, bureaucratic policy, and foreign policy.

POLI 5361. Politics of Education. 3 Semester Credit Hours.
Study the relationship between politics and education in America, including both K-12 and post-secondary systems.

POLI 5362. Environmental Policy. 3 Semester Credit Hours.
Study the politics of the natural environment with emphasis on the role of government in environmental protection.

POLI 5365. Government Seminar. 3 Semester Credit Hours.
Explore selected topics in the study of Government. Contents vary according to the needs and desires of students. Independent reading, research, discussion, and writing under personal direction of instructor. May be repeated once for credit when topic varies.

POLI 5388. Problems. 1-3 Semester Credit Hours.
Explore selected topics in Political Science. Independent reading, research, discussion, under supervision of senior professor.

POLI 5391. Political Science Practicum. 3 Semester Credit Hours.
Gain professional experience in school administration, counseling, supervision, college or public school teaching, or other public service professions. May be repeated once for credit. Field experience fee: $75.

POLI 5398. Political Science Thesis. 3 Semester Credit Hours.
Scheduled when student is ready to begin thesis. No credit until thesis is accepted.

Public Administration (PADM)

PADM 5301. Introduction to Managing Public Sector Organizations. 3 Semester Credit Hours.
Learn the key dynamics in managing public sector organizations. Study the classic readings in the history of public administration in the United States, providing context for the current practice of public management. Particular emphasis will be on the distinctive aspects of public sector organizations and managerial strategies to promote organizational effectiveness and change in these complex environments.

Psychology (PSYC)

PSYC 3301. Psychology of Learning. 3 Semester Credit Hours.
Investigate major theoretical approaches, concepts and principles, and experimental methods of learning. Prerequisite(s): PSYC 2301 or permission of department chair.

PSYC 3302. Health Psychology. 3 Semester Credit Hours.
Apply psychology principles and techniques to the fields of health and medicine, including emotional, behavioral, cognitive, social, and multidisciplinary factors. Examine the effects of illness and injury on behavior. Prerequisite(s): PSYC 2301.

PSYC 3303. Educational Psychology. 3 Semester Credit Hours.
Apply psychological theories and principles to teaching and learning. Learn theories of human development, learning, and motivation, and how these impact the processes of teaching and learning. Analyze the impact of cultural diversity on the learning process and standardized testing. Students seeking teacher certification must be admitted to the Teacher Education Program. Prerequisite(s): PSYC 2301 or permission of department chair.

PSYC 3305. Human Cognitive Processes. 3 Semester Credit Hours.
Study human cognition and information processing, including perception, attention, memory, reasoning, and problem solving. Explore experimental methods and current theories of human cognition. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of department chair.

PSYC 3307. Human Lifespan. 3 Semester Credit Hours.
Explore development from conception through adulthood with emphasis on social adaptation of individuals and roles in families, groups, and communities. Study cognitive, social, personal and biological factors of the stages of development.

PSYC 3309. Writing in Psychology. 3 Semester Credit Hours.
(WI) Examine advanced technical communication in psychology. Study and use the current edition of the Publication Manual of the American Psychological Association for formal research reports, literature reviews, grant proposals, and professional articles. Learn to write professional psychological reports. Prerequisite(s): PSYC 2301, ENGL 1301, and ENGL 1302, or permission of Departmental Chair.

PSYC 3310. Abnormal Psychology. 3 Semester Credit Hours.
Study an overview of the history, causes, and treatments of deviant behavior. Learn psychological, social, and physiological factors as they relate to the development of abnormal behavior and its subsequent treatment. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of Departmental Chair.
PSYC 3311. Behavior Analysis and Behavior Management. 3 Semester Credit Hours.
Examine the basic principles and methods of behavior analysis and behavior management techniques. Study systematic review of behavioral and cognitive-behavioral methodologies for dealing with human problems such as disruptive behavior, personal adjustment difficulties, behavioral deficits, phobias and fears, developmental disorders, stress and maladaptive behavior in a variety of settings. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of department chair.

PSYC 3312. Biological Foundations of Behavior. 3 Semester Credit Hours.
Study biological basis of behavior. Learn in-depth examination of physical structure of the human body and the role of chemical and electrical operations within it. Emphasis will be placed on the developmental, cognitive, affective, and behavioral effects of such operations, and recent research will be reviewed. Prerequisite(s): PSYC 2301, BIOL 3400, 6 hours of lab science, and PSYC 3309 or permission of department chair.

PSYC 3315. Human Sexuality. 3 Semester Credit Hours.
Study psychology of sexual behavior, exploring the field’s diversity, controversy, and current research, in a non-judgmental way. Explores historical, biological, psychological, and relevant social aspects of human sexuality. Prerequisite(s): PSYC 2301.

PSYC 3318. Psychology of Gender. 3 Semester Credit Hours.
An examination of gender from a psychological and cultural perspective. Discusses how and why social expectations, standards, and opportunities tend to be systematically related to gender and the corresponding effects on male and female experience. Prerequisite: PSYC 2301 or permission of department chair.

PSYC 3320. Psycholinguistics. 3 Semester Credit Hours.
Analyze the study of language, understanding languages, producing language and speech, language development, and related topics such as reading, language and the brain, linguistic diversity, and universals. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of department chair.

PSYC 3330. Statistics for the Behavioral Science. 3 Semester Credit Hours.
Study measures of central tendency, variability, and correlation. Analyze applications of statistical inference to research in Psychology, reliability and validity of psychological tests and measurement, analysis of variance, multiple analysis of variance, and regression. Prerequisite(s): PSYC 2301 and MATH 1314 or MATH 1342 or permission of department chair.

PSYC 3350. Personality. 3 Semester Credit Hours.
Analyze personality, the unique and relatively stable patterns of behavior, thoughts, and feelings that make individual human beings. Learn the different theoretical approaches - psychodynamic, cognitive, behavioral, humanistic, and existential — as they relate to personality and personality development. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of department chair.

PSYC 3360. Sport Psychology. 3 Semester Credit Hours.
Explore theories and research related to sports and exercise behavior. Study the history of sport psychology, behavioral principles, anxiety, motivation, leadership, group dynamics, gender, and personality. Analyze related principles to exercise and sport performance. Prerequisite(s): PSYC 2301 or permission of department chair.

PSYC 4301. Psychological Assessment. 3 Semester Credit Hours.
Explore principles of psychological testing. Study uses and critical evaluation of tests, achievements, intelligence, aptitude, and personal characteristics. Prerequisite(s): PSYC 2301, PSYC 3309, and PSYC 3330, or permission of department chair.

PSYC 4302. Adaptive Psychology. 3 Semester Credit Hours.
A consideration of how adaptation has influenced social, cognitive and developmental processes in humans. Comparisons between humans and other species, and between different human cultures will be included. Prerequisite(s): PSYC 2301, BIOL 3400, 6 hours of lab science, and PSYC 3309 or permission of department chair.

PSYC 4303. Animal Behavior. 3 Semester Credit Hours.
Study animal behavior research from a psychological perspective. Examine the development and display of behaviors that include subject samples ranging from insects to humans conducted in natural, quasi-experimental, and experimental studies. Prerequisite(s): PSYC 2301, BIOL 3400, 6 hours of lab science, and PSYC 3309 or permission of department chair.

PSYC 4305. Social Psychology. 3 Semester Credit Hours.
Learn theory and phenomena of social psychology. Study the effect of social variables upon the behavior of individuals. Examine socialization, language and communication, prejudice, social attitudes, attitude change, aggression, prosocial behavior, and group behavior. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of department chair.

PSYC 4310. Industrial and Organizational Psychology. 3 Semester Credit Hours.
Study basic theories and practices of Industrial/Organizational psychology including selection testing, job analysis, performance appraisal training, employment motivation, job satisfaction, leadership and group processes within organizations. Prerequisite(s): PSYC 2301 and PSYC 3309 or permission of department chair.

PSYC 4315. Fundamentals of Program Evaluation. 3 Semester Credit Hours.
Study fundamentals of program evaluation methods used in the fields of education and human service. Learn theory, methodology, utilization of information, standards of practice and ethics. Prerequisite(s): PSYC 2301, PSYC 3309, and MATH 1342 or PSYC 3330; or permission of instructor.

PSYC 4320. History of Psychology. 3 Semester Credit Hours.
(WI) Analyze historical prescientific psychology in philosophy and physiology through the period of the psychological schools of thought. Prerequisite(s): PSYC 3307, PSYC 3309, PSYC 3330, PSYC 3312, PSYC 4305; or permission of department chair.

PSYC 4325. Motivation. 3 Semester Credit Hours.
Learn synthesis of theories of motivation with practical applications of motivating people, such as students or business employees. Examine historical and recent developments and their relationship to behavioral research, including concepts such as goals, work quality, work environment, and the use of rewards and other incentives. Prerequisite(s): PSYC 2301.

PSYC 4332. Psychopharmacology. 3 Semester Credit Hours.
Study neuroscientific basis of the effects of drugs on behavior. Emphasis will be placed on major antipsychotic, anti-anxiety, antidepressant drugs and their clinical use and side effects and drug abuse such as alcohol, marijuana, and cocaine. Prerequisite(s): PSYC 2301, BIOL 3400, 6 hours of lab science, and PSYC 3309 or permission of department chair.
PSYC 4350. Forensic Psychology. 3 Semester Credit Hours.
Study forensic psychology and its relation to criminal justice. Emphasis is on social and cognitive psychology aspects like eyewitness testimony and courtroom behavior. Analyze psychological aspects of the legal system such as juvenile justice, competency to stand trial, and expert psychological testimony. Prerequisite(s): PSYC 2301.

PSYC 4384. Psychology Undergraduate Internship. 1-3 Semester Credit Hours.
Explore supervised professional activities in psychology. Major emphasis is placed on the student’s involvement in successful practices in the area of interest. Students must have the approval of the Department Chair to enroll in this course.

PSYC 4388. Psychology Problems. 1-3 Semester Credit Hours.
Study of various topics related to Psychology. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Entry into the course will be arranged by the department chair.

PSYC 4389. Special Topics in Psychology. 3 Semester Credit Hours.
Examine different topics each semester with a focus on contemporary issues in psychology. This course may be repeated for credit as the topic changes.

PSYC 4435. Principle Research for Behavioral Sciences. 4 Semester Credit Hours.
Study various research designs used in the behavioral sciences. Laboratory experiences will be required to acquaint the student with experimental procedures. Instruction will also be provided in writing research reports according to the APA manuscript style and SPSS statistical applications. Prerequisite(s): PSYC 3309 or ENGL 3309 and PSYC 3330 or equivalent.

PSYC 5090. Psychology Comprehensive Examination. 0 Semester Credit Hours.
Study and take the psychology examination for Non-thesis students. Register for the comprehensive examination during final semester of graduate coursework, or upon permission of advisor. All comprehensive examinations will be written, but an oral component may also be required. A maximum of three attempts will be allowed. Thesis student do not take this examination.

PSYC 5198. Psychology Thesis. 1-6 Semester Credit Hours.
Independent research course in which a student proposes and completes an original, quantitative research project in conjunction with three graduate faculty members who serve on the thesis committee. Scheduled when the student is ready to begin thesis. No credit awarded until proposal and thesis are approved, respectively. Six hours of thesis credit is required. Prerequisite(s): PSYC 5300 and PSYC 5301 and successful completion of 12 additional credit hours in the degree plan and, permission of the Chair of the thesis committee or department chair.

PSYC 5300. Behavioral Statistics. 3 Semester Credit Hours.
Review of descriptive statistics with emphasis on inferential statistics. Learn correlation, one-way and two-way analysis of variance, regression analysis and experimental design. Use of computer software with emphasis on experience with SPSS. Prerequisite(s): undergraduate statistics recommended.

PSYC 5301. Research Methods. 3 Semester Credit Hours.
Study scientific method of research, types of research and research design. Review, analyze and interpret research findings in major field and develop a research project with the assistance of their instructor. Prerequisite(s): PSYC 5300 or equivalent graduate statistics course.

PSYC 5302. Social Psychological Processes. 3 Semester Credit Hours.
Examine the individual in a social and cultural context. Learn the behavior of groups, the roles of individuals within groups, and the influence of groups on an individual's perceptions, attitudes, emotions, and behavior. Study major theories and supporting research.

PSYC 5303. Theories of Learning. 3 Semester Credit Hours.
Study major theories of learning, factors which influence the process of learning, and application of these theories and processes to general and special populations. Prerequisite(s): Admission to Graduate School or permission of department chair.

PSYC 5304. Human Development. 3 Semester Credit Hours.
Study the development of human beings from conception to death. Analyze research and theory into physical, cognitive, social, and personality development in each of the different age groups: prenatal, infancy, childhood, adolescence, and adulthood.

PSYC 5311. Culture, Minority and Gender Issues. 3 Semester Credit Hours.
Study interaction of social/cultural groups in America, problems of minorities and ethnic groups, problems related to gender and age, problems within family systems and contemporary sources of positive change.

PSYC 5313. Crisis Intervention and Management Individual and Family. 3 Semester Credit Hours.
Examine dynamics and treatment of situational crises in various settings. Learn theories and approaches to crisis intervention and management. Prerequisite(s): COUN 5350 or permission of department chair.

PSYC 5314. Assessment Intelligence and Achievement. 3 Semester Credit Hours.
Study the selection, administration, and interpretation of selected tests used in the individual measurement of intelligence. Prerequisite(s): PSYC 5358 and PSYC 5381, or permission of department chair. Field experience fee - $75.

PSYC 5315. Physiological Psychology. 3 Semester Credit Hours.
Examine biological basis of behavior with an emphasis on the structure and biochemistry of the human nervous system. Explore interactive relationships between biological processes, psychopharmacology, genetics, neurological disorders, normal growth and maturation, perception, memory, emotion, stress, mental disorders, consciousness, and communication. Study of contemporary theories and research are investigated and critiqued.

PSYC 5316. Advanced Quantitative Methods and Experimental Design. 3 Semester Credit Hours.
Learn statistical techniques to analyze quantitative data resulting from experimental research designs. Engage in a continuation of PSYC 5300 and PSYC 5301 and students are required to demonstrate proficiency in SPSS for data analysis. Review One-Way and Two-Factor ANOVA. Emphasis on ANCOVA, MANOVA, MANCOVA, multiple regression, logistic regression, data reduction techniques (factor analysis and principal components analysis), and non-parametric analyses appropriate for two- and multi-group designs. Explore the integration of multivariate and advanced statistical design with applicable research paradigms. Prerequisite(s): PSYC 5300 and PSYC 5301.

PSYC 5320. History and Systems. 3 Semester Credit Hours.
Analyze the historical development of the science of psychology from early philosophical theories through the establishment of psychology as a science to modern theoretical positions.
PSYC 5321. Evolutionary Psychology. 3 Semester Credit Hours.
Evaluate current theories of adaptation with a large focus on how adaptation has influenced social, cognitive and developmental processes in humans. Review and discuss evidence from cross-cultural and cross species studies.

PSYC 5322. Psychometrics. 3 Semester Credit Hours.
Study systematic treatment of the logic of measurement, including scaling models, validity, variance and covariance, reliability, theories of measurement error an test construction. Prerequisite(s): Admission to Graduate School or permission of department chair.

PSYC 5360. Foundations of School Psychology. 3 Semester Credit Hours.
Study the foundations, professional standards, ethics, and laws related to the delivery of school psychological services. Prerequisite(s): admission to graduate school or permission of department chair.

PSYC 5380. Personality Social Assessment. 3 Semester Credit Hours.
Gain instruction and supervision in the assessment of emotional, motivational, interpersonal, and attitudinal characteristics of children and adults. Learn the administration, scoring, and interpretation of many widely-used tests. Prerequisite(s): COUN 5358 and PSYC 5381, or permission of department chair.

PSYC 5381. Assessment and Evaluation Fundamentals. 3 Semester Credit Hours.
Examine nature and development of standardized tests, with emphasis on ethical standards, psychometric theory, test standards, and test construction. Learn selection criteria and utilization of standardized or other instruments in various environments are considered. Explore evaluations and critiques of published tests and experiential exposure to different types of psychological tests. Prerequisite(s): Admission to the Graduate School.

PSYC 5382. Behavior Management and Therapy. 3 Semester Credit Hours.
Examine basic theories of human learning, major approaches to behavior management and therapy and principles of applied behavior analysis. Learn formal treatment planning application and evaluation of programs for management of specific behavioral/psychological problems. Study case reviews and practice in individual interventions.

PSYC 5383. Consultation and Supervision. 3 Semester Credit Hours.
Study application of psychological principles of consultation and supervision in selected settings. Emphasis is on analysis of client and consultee/ supervisor behaviors, individual and group communications, program evaluation and possible intervention options in selected environments. Prerequisite(s): COUN 5350 or PSYC 5360, and COUN 5353, or permission of department chair.

PSYC 5384. Psychology Internship I. 3 Semester Credit Hours.
Explore supervised professional activities in psychology. Major emphasis is placed on the student's involvement in successful practices in the area of interest. Students must have met all academic and professional standards of practice before placement. Lab experiences are included. Prerequisite(s): Completion of all course work required by the degree and application for internship. Field experience fee - $75.

PSYC 5385. Psychology Internship II. 3 Semester Credit Hours.
Explore professional activities in psychology in the student's area of interest. Major emphasis is placed on the integration of theoretical and conceptual principles, as well as professional and personal skill development. Prerequisite(s): PSYC 5383 and application for internship. Field experience fee - $75.

PSYC 5388. Psychology Problems. 1-3 Semester Credit Hours.
Study selected problems in psychology. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Prerequisite(s): graduate standing and permission of department chair.

PSYC 5389. Special Topics in Psychology. 1-3 Semester Credit Hours.
Examine different topics each semester with a focus on contemporary issues in counseling. This course may be repeated for credit as the topic changes.

PSYC 5391. Psychology Practicum I: Field Experience. 3 Semester Credit Hours.
Explore supervised experience in settings such as marriage and family, mental health, and/or counseling and guidance placements outside the University. The field experience will consist of 150 clock hours with 100 client contact hours. Prerequisite(s): PSYC 5391, a 3.0 GPA, and permission of department chair. Field experience fee - $75.

PSYC 5392. Psychology Practicum II: Field Experience. 3 Semester Credit Hours.
Explore settings such as marriage and family, mental health, and/or counseling and guidance placements outside the University. The field experience will consist of 150 clock hours with 100 client contact hours. Prerequisite(s): PSYC 5392, a 3.0 GPA, and permission of department chair. Field experience fee - $75.

PSYC 5393. Psychology Practicum III: Field Experience. 3 Semester Credit Hours.
Explore settings such as marriage and family, mental health, and/or counseling and guidance placements outside the University. The field experience will consist of 200 clock hours with 100 client contact hours. Prerequisite(s): PSYC 5393, a 3.0 GPA, and permission of department chair. Field experience fee - $75.

Reading (READ)
READ 3301. Introduction to Children's Literature. 3 Semester Credit Hours.
Study literature for children focusing on the use of classic and contemporary texts to promote interest, motivation, and critical reading skills for self-selected reading in the elementary student. Learn to use texts to emphasize literary genre, text structures, and literary devices as tools for making connections and meaning. Prerequisite(s): Required core ENGL classes for degree. Credit will not be granted for READ 3301 and ENGL 3350.

READ 3311. Reading I: Reading Acquisition and Development. 3 Semester Credit Hours.
Explore research-based competencies essential for effective literacy instruction. Study characteristics of normal reading development in the emergent/early learner, explore materials, procedures, assessments and instructional methods considered effective in teaching oral language, writing, strategy building for comprehension, vocabulary, word identification, and review diagnoses of reading difficulties in the young reader. Prerequisite(s): Completion of or concurrent enrollment in required core and degree ENGL and concurrent enrollment in EDUC 3320.
READ 3320. Fundamentals of Teaching Reading. 3 Semester Credit Hours.
(WI) This course focuses on research-based competencies essential for effective literacy instruction. Surveys characteristics of normal reading development in the elementary through middle school learner; explores materials, procedures, assessment and instructional methods considered effective in teaching oral language, writing, strategy building for comprehension, vocabulary, and word identification.

READ 3330. Reading II: Assessment, Instruction and Reader Development. 3 Semester Credit Hours.
(WI) Study characteristics of the transitional and fluent literacy learner, methods of assessment and instruction for strategy building, comprehension, vocabulary, word identification, and TEKS/TAKS. Examine normal reading development, reading difficulties, strategies for assessing/addressing reading differences including diverse learner reading processes and development of literacy in English or ELL. Prerequisite(s): READ 3311 and Admission to the Teacher Education Program. Concurrent enrollment in EDUC 3330.

READ 3335. Content Area Reading. 3 Semester Credit Hours.
(WI) Examine factors that influence learning from content text and study specific instructional strategies which promote comprehension, vocabulary development, effective study strategies, and test-taking skills. Study ways to modify text for diverse learners and the principles of research-based reading instruction. Must be admitted to the Teacher Ed Program.

READ 4304. Reading and Writing Across the Curriculum. 3 Semester Credit Hours.
(WI) Study theory and instructional strategies for teaching the writing process in elementary and middle schools. Learn stages of the writing process, issues at the different grade levels, teaching with mini-lessons, early literacy, spelling, handwriting, developing listening skills, process writing, and the use of children's literature to teach writing. Prerequisite(s): READ 3330 and EDUC 3330, and concurrent enrollment in READ 4305 and EDUC 4304 or EDUC 4330.

READ 4305. Implement Classroom Reading Instruction. 3 Semester Credit Hours.
Study state and national reading initiatives, approaches to teaching reading, procedures for organizing the elementary and middle school classrooms for reading instruction, research on effective reading-writing instruction, and roles of school personnel and parents in the school reading program. Prerequisite(s): READ 3330 and EDUC 3330, and concurrent enrollment in READ 4304 and EDUC 4304 or EDUC 4330, or permission of department chair.

READ 5372. Language Arts. 3 Semester Credit Hours.
Examine research and strategies for implementing the reading/writing process in classrooms. Explore integrated curriculum, the use of children's literature, classroom management and organization, evaluation, working with diverse learners, and developing support networks. Prerequisite(s): READ 5373 or 9 hours of undergraduate READ courses or permission of department chair.

READ 5373. Foundations of Reading. 3 Semester Credit Hours.
Examine theoretical models of the reading process, historical perspectives on reading instruction, and language learning. Develop an understanding of the construction of reading theory and its relationship to instructional practices. Prerequisite(s): Elementary, secondary, or all-level certification or permission of department chair.

READ 5374. Reading Resources and Materials. 3 Semester Credit Hours.
Study print and non-print materials including content-area textbooks, trade books, and computer software. Evaluate materials and application of reading principles to instruction in content areas. Prerequisite(s): READ 5373 or 9 hours of undergraduate READ courses or permission of department chair.

READ 5375. Reading Research and Assessment. 3 Semester Credit Hours.
Examine methods and techniques employed in reading research and assessment. Review research and the development, implementation, and dissemination of classroom research. Explore the application of appropriate diagnostic and correctional procedures for elementary, secondary, and adult learners having difficulty reading. Prerequisite(s): READ 5373 or 9 hours of undergraduate READ courses or permission of department chair.

READ 5376. Organization and Administration of Reading Programs. 3 Semester Credit Hours.
Study state laws, trends and issues related to the administration of reading programs. Examine instructional issues and reading programs for pre-K through adult learners, censorship issues, textbook/test adoption procedures, roles and responsibilities in the reading program, staff development, and change strategies. Prerequisite(s): READ 5373 or 9 hours of undergraduate READ courses or permission of department chair. Certification Fee - $150.

READ 5388. Reading Problems. 1-3 Semester Credit Hours.
Study of selected problems in reading. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Prerequisite(s): Permission of department chair.

READ 5391. Reading Practicum. 3 Semester Credit Hours.
Apply knowledge gained in previous Reading Specialist certification courses. Practicum candidates will be directly involved in providing 180 clock hours of reading services to students in a local public or private school setting, and will document expertise and experience in all four Standards. Prerequisite(s): READ 5373, READ 5374, READ 5375, READ 5376 and ENGL 5321; two years of creditable classroom teaching experience. Field experience fee - $75.

Religious Studies (RELS)

RELS 3300. Introduction to Religious Studies. 3 Semester Credit Hours.
Examine religious phenomena from a non-confessional, interdisciplinary academic perspective. Explore the concept of religion as a component of culture in a postmodern, diversified, global community. Survey major religious traditions, and trends throughout the history of the discipline.
RELS 3301. Classical Greek Mythology. 3 Semester Credit Hours.
Study classical myths and legends pertaining to the Greek pantheon, heroes, and other supernatural beings and events. Evaluate samples of English literature alluding to classical Greek mythology, and understand the cultural significance of myth within classical Greek society.

RELS 3302. Dead Sea Scrolls. 3 Semester Credit Hours.
Explore the archaeological discovery of the Dead Sea Scrolls. Examine and interpret content of selected manuscripts. Evaluate the history of controversies surrounding Scrolls management and presentation to the academic world.

RELS 3303. Hebrew Scriptures. 3 Semester Credit Hours.
Examine the canonical Hebrew scriptures in the light of present-day scholarship. Read translated scriptural passages to evaluate sources, historical and cultural milieus, and forms of modern criticism. Reading competency in the Hebrew language is not required.

RELS 3304. World Religions. 3 Semester Credit Hours.
Study the philosophical, ethical, and social dimensions of the religions of the world. Special emphasis on the major world religions, but lesser known religions will be explored to gain a broad view of the diversity of religious experience and tradition.

RELS 3305. Wicca and Neo-Paganism. 3 Semester Credit Hours.
A critical examination of Wicca and Neo-pagan groups in the US. Explores the history of such groups and exposes the student to academic research in this area.

RELS 3329. Church and State. 3 Semester Credit Hours.
Surveys church-state relations in U.S. history. Examines the role religion has played in American political life, culture, and society. This course is cross-listed with HIST 3329; only one may be taken for credit.

RELS 3355. Religion and Politics. 3 Semester Credit Hours.
Explores the historic development of church-state relations in the United States, the evolution of church-state constitutional law, and the impact of this history and law on the current political environment. Special emphasis placed on the role played by religion in political campaigns, local politics, and interest group activities. This course is cross-listed with POLI 3355; only one may be taken for credit.

RELS 4300. Prophets of Ancient Israel. 3 Semester Credit Hours.
Examine prophet types in light of their historical and cultural milieu. Understand the differences between the eponymous ancestors, leaders, wonder-workers, and literary prophets of Ancient Israel, and evaluate the relationship between prophecy, prophets, and scribal culture in the ancient Near East.

RELS 4310. Myth and Ritual. 3 Semester Credit Hours.
Examine the religious beliefs and practices of small-scale societies based upon ethnographic literature. Special emphasis on altered states, shamanism, bewitching, and religious practitioners. May be crosslisted with ANTH 4310. Only one may be taken for credit.

RELS 4312. Psychology of Religion. 3 Semester Credit Hours.
Discover the major issues, theories, and psychological approaches to the study of religion, and address the practice of pastoral counseling. Explore the formation of meaning systems, motivation for behaviors, and psychological accounts for religious impulses and phenomena. Prerequisite(s): None.

RELS 4315. Philosophy of Religion. 3 Semester Credit Hours.
Examine religious phenomena, and concepts of God, miracles, claims of religion, the problem of evil, and religious ethics. Study and evaluate the relationship of religion and philosophy, and the place of philosophy within the religious experience. Prerequisite(s): None.

RELS 4320. Religious Terrorism. 3 Semester Credit Hours.
Examine the religious motivations, support, and tactics behind the phenomena of domestic and foreign terrorism. Prerequisite(s): None.

RELS 4330. Religions of the Middle East. 3 Semester Credit Hours.
Examine the history, beliefs, practices, and conflicts behind the major religious traditions of Judaism, Christianity, and Islam. Prerequisite(s): None.

RELS 4389. Special Topics in Religion. 3 Semester Credit Hours.
Examine selected topics within religious studies. May be repeated for credit when topics vary. Prerequisite(s): None.

RELS 5300. Introduction to Religious Studies. 3 Semester Credit Hours.
Examine religion as an aspect of culture in a postmodern, diversified, global community. Evaluate the history and concepts used in the academic study of religion, and the major religious traditions of the world. Prerequisite(s): None.

RELS 5304. Sociology of Religion. 3 Semester Credit Hours.
Examine religion and religious phenomena from the perspectives, theories, and methods of sociology. Evaluate the major works of classical theorists such as Durkheim, Weber, and Marx, and recent theorists such as Berger and Stark.

RELS 5310. Anthropology of Religion. 3 Semester Credit Hours.
Apply anthropology to religion through a study of ethnographies, and literature pertaining to the study of religious phenomena. Explore myth and ritual, altered states, healing and bewitching, and the roles of religious practitioners. This course is cross-listed with ANTH 5310, and only one may be taken for credit.

RELS 5312. Psychology of Religion. 3 Semester Credit Hours.
Examine major issues and theories in the psychological approach to the study of religious phenomena. Analyze the literature of theorists, the contributions of neuroscience, evolutionary psychology, consciousness research, and regressive hypnotherapy in the study of religion.

RELS 5315. Philosophy of Religion. 3 Semester Credit Hours.
Examine religious phenomena, and concepts of God, miracles, claims of religion, the problem of evil, and religious ethics. Study and evaluate the relationship of religion and philosophy, and the place of philosophy within the religious experience.

RELS 5320. Religious Terrorism. 3 Semester Credit Hours.
Examines the religious motivations, support, and tactics behind the phenomena of domestic and foreign terrorism. Analyze case studies and histories of specific terrorist organizations, justifications for violence, and terrorist targets. Maybe crosslisted with HLS 5320. Only one may be taken for credit.

RELS 5389. Special Topics in Religion. 3 Semester Credit Hours.
Examine selected topics within religious studies. Students may enroll for additional credit hours when topics vary.

Social Science (SOSC)

SOSC 3300. Social Science Proseminar. 3 Semester Credit Hours.
Learn professional communication, advanced writing expectations, and ethics in professional writing in preparation to pursue advanced studies in the social sciences.
Social Work (SOWK)

SOWK 3300. Introduction to Social Work. 3 Semester Credit Hours.
Examine the profession of social work, its historical development, values, ethics, and various fields of practice, with an emphasis on the generalist perspective and populations at risk. 30 hours of volunteer work with a non-profit community agency is required as part of the course.

SOWK 3301. Methods and Skills of Social Work. 3 Semester Credit Hours.
Study the Generalist Social Work Practice Model. Develop social work skills in the principles of conducting a helping interview, initial client contact, attending and listening, empathetic responses, exploration and elaboration, questioning, gaining cooperation, self-disclosure, and termination. Understand issues of problem-solving with diverse populations and persons from different cultural backgrounds, and examine ethical issues of helping relationships. Prerequisite(s): SOWK 3300 or concurrent registration.

SOWK 3302. Social Welfare in the United States. 3 Semester Credit Hours.
Study human services in the United States and how they have developed over time. Special Emphasis on services and programs directed at the most vulnerable populations in our society. Race, ethnicity, gender, and socioeconomic status are considered in an effort to understand the need for and eligibility for various human services and social welfare programs.

SOWK 3303. Social Work with Diverse Populations. 3 Semester Credit Hours.
Examine theoretical, political, historical, cultural, and economic issues related to diverse populations. Special emphasis on social work practice with oppressed populations, societal forces that promote discriminatory and oppressive values, beliefs, and attitudes.

SOWK 3304. Human Behavior and Social Environment I. 3 Semester Credit Hours.
Use systems theory as organizing perspective to examine the bio-psycho-social factors influencing human development. Analyze factors affecting human functioning, and their relationship to and implications for social work practice.

SOWK 3305. Biological Foundations of Social Work Practice. 3 Semester Credit Hours.
Explore issues related to human biological functioning as applied to social work practice. Emphasis on the functioning of the human body across the lifespan, healthy living and prevention of illness, and illness and disabilities (physical and mental) that social workers encounter in clients.

SOWK 3310. Human Behavior and Social Environment II. 3 Semester Credit Hours.
Explore issues related human behavioral functioning as applied to social work practice. Emphasis on theories and knowledge about the range of social systems in which individuals live and the ways in which systems deter people from achieving well-being, including values and ethical issues related to bio-psycho-social theories. Prerequisite(s): SOWK 3304.

SOWK 3311. Social Work Practice I. 3 Semester Credit Hours.
Examine theories and methodologies needed for generalist social work practice with individuals and small groups. Evaluate the value base of the social work profession and basic practice concepts for understanding a variety of intervention models in diverse settings. Prerequisite(s): Admission to the Social Work Program and SOWK 3301.

SOWK 3300. Social Welfare Policy. 3 Semester Credit Hours. (WI) Study social welfare as society's response to the needs of individuals, groups, and communities. Examine the history of policy development reflecting society's changing values. Analyze policy to determine impact on various systems, including populations at risk, and explore the role of social policy in promoting social justice and social change. Prerequisite(s): SOWK 3302.

SOWK 4301. Social Work and Mental Health. 3 Semester Credit Hours.
Study mental disorders, and psychotropic medications, and use the current Diagnostics and Statistical I Manual of Mental Disorders, published by the American Psychiatric Association, to assess mental issues. Work on interdisciplinary teams to evaluate social worker roles in interacting with people with mental health issues.

SOWK 4311. Child Welfare. 3 Semester Credit Hours.
Examine the history and practice of child welfare. Study programs and policies dedicated to child welfare, and learn the social work practice settings for the discipline.

SOWK 4320. Social Work Research Statistics. 3 Semester Credit Hours.
Study foundational principles and concepts of the scientific method and social science research. Learn the basics of statistical data interpretation and critical analysis of research, including quantitative and qualitative research strategies, research design and methodology, and inferential and descriptive statistics.

SOWK 4321. Writing for Social Work Research. 3 Semester Credit Hours. (WI) Apply social work knowledge to facilitate understanding and interpretation of research findings. Develop the evaluation and analysis process, and understand ethical issues in social science research. Explore evaluation of practice, critical evaluation of published research, and completion of a research proposal. Prerequisite(s): SOWK 4300 and SOWK 4320.

SOWK 4324. Social Work Practice II. 3 Semester Credit Hours.
Study theory and practice of social change at community, society, and global levels. Examine methods of resource delivery and redistribution, and learn models of community organization, including community development, social action, and social planning. Prerequisite(s): SOWK 3301 and SOWK 3311.

SOWK 4331. Death and Dying. 3 Semester Credit Hours.
Examine the ramifications of death, including the experiences and rights of the dying and the significance to those who mourn. Use major sociology theories to analyze societal meaning of the reality and symbolism of death. Credit for SOWK 4331 will not be awarded. Prerequisite(s): SOCI 1301.

SOWK 4333. Social Work Field Seminar. 3 Semester Credit Hours.
Integrate field experience and social work skills in order to transition from student to professional social worker. The Field Seminar is a course taken concurrently with a block field placement (SOWK 4932). Serves as an integrative capstone course for the field placement and social work program. Corequisite: SOWK 4932. May not be taken for credit if SOWK 4684 or SOWK 4685 has been completed.

SOWK 4334. Social Work Seminar. 1-3 Semester Credit Hours.
Study current trends and issues related to professional social work practice, social service delivery, and populations at risk. May be repeated for credit when topics vary. Prerequisite(s): Junior standing & permission of department chair.

SOWK 4388. Social Work Problems. 1-6 Semester Credit Hours.
Engage in independent reading and research on selected topics within social work. Entry into the course will be arranged by faculty member teaching the course.
SOWK 4684. Social Work Field Placement I. 6 Semester Credit Hours.
Integrate theory and professional skill in a supervised, social work agency-based field placement. A minimum of 225 hours required to be completed and participation in a three-hour-per-week seminar. Prerequisite(s): Acceptance into the field program and completion of SOWK 3301, SOWK 3303, SOWK 3311 and SOWK 3304. Internship fee: $125.

SOWK 4685. Social Work Field Placement II. 6 Semester Credit Hours.
Integrate theory and professional skill in a supervised, social work agency-based field placement. Special emphasis on generalist social work practice and on the interrelationships among human behavior, social policy, research, and practice. A minimum of 225 hours required to be completed and participation in a three-hour-per-week seminar. Prerequisite(s): SOWK 4684 with a grade of C or better. It is advised that SOWK 4224 be taken as a co-requisite. Internship fee: $125.

SOWK 4932. Social Work Field Instruction. 9 Semester Credit Hours.
Integrate social work theory and professional skill within a supervised, agency-based generalist social work setting. A minimum of 450 hours required to be completed. Prerequisite(s): Acceptance into the field program, SOWK 4321. Corequisite SOWK 4333. May not be taken for credit if SOWK 4684 or SOWK 4685 has been completed. Internship fee: $175.

Sociology (SOCL)

SOCL 3301. Sociology of the Family. 3 Semester Credit Hours.
Study the family as a social institution with emphasis on formation, functions, maintenance, child rearing, and family disorganization.

SOCL 3303. Race and Ethnic Relations. 3 Semester Credit Hours.
Analyze relationships between dominant groups and minority groups that make up American society. Examine theories of race relations and prejudice, the meaning of racial differences, group conflict, and modes of accommodation.

SOCL 3305. Criminology. 3 Semester Credit Hours.
Examine theories of criminology and significant research on causes, extent, cost and ecology of crime, police, criminal, and juvenile courts, and prisons and reformatories. Special emphasis on prevention and rehabilitation. Credit for both CRIJ 3305 and SOCL 3305 will not be awarded.

SOCL 3308. Deviant Behavior. 3 Semester Credit Hours.
Examine factors and conditions leading to behaviors that violate and deviate from fundamental social values. Analyze the relationship of personal and social maladjustment in relation to the various theories of deviant behavior.

SOCL 3310. Sociology of Aging. 3 Semester Credit Hours.
Study the reciprocal relationship between society and those considered aged by society, utilizing concepts and theoretical frameworks applicable to that population group. Explore the social forces that impinge on the aging process, including socially constructed images of the aged, and patterns of inequality of gender, race, and economics.

SOCL 3312. Environmental Sociology. 3 Semester Credit Hours.
(WI) Examine relationships and interactions between society and the environment. Explore how the natural world influences the way societies are organized, with special emphasis on human communities as part of natural ecosystems. Prerequisite(s): None.

SOCL 3340. Media and the Unreal World. 3 Semester Credit Hours.
Examine the interactions of culture and the media with a focus on representations of race, class, gender, and sexuality. Evaluate contemporary mass media to explore the unique relationship between media content, the industry that creates it, and audiences whose interpretations and demands constitute its market.

SOCL 4301. The Military Family. 3 Semester Credit Hours.
Examine the relationship between the work organization and the family in the armed forces of the United States. Using a sociological perspective, analyze and discuss contemporary issues, situations, problems, and policies relevant to military families.

SOCL 4303. Social Inequalities. 3 Semester Credit Hours.
Examine social inequality and categories of difference from a sociological perspective. Analyze social difference and stratification on the basis of race/ethnicity, class, gender, religion, and sexuality by examining how these categories are constructed, institutionalized, and experienced. Special emphasis on economic and labor-based inequality through the lens of contemporary global processes.

SOCL 4304. Sociology of Religion. 3 Semester Credit Hours.
Examine the principles of religion, religious belief, and practice as a sociological concept. Special emphasis on the relationship of religion to the progress and stability of the social order.

SOCL 4305. Sociological Theory. 3 Semester Credit Hours.
(WI) Examine the major schools of sociological thought, including perspectives from both classic and contemporary sociological theory.

SOCL 4310. Sociology of the Body. 3 Semester Credit Hours.
Study the body as the container and expression of the self, as the object of social control, and the body as it relates to race, gender, sex, class, age, ability, sexuality, and transgender identities.

SOCL 4311. Sociology of Sexuality. 3 Semester Credit Hours.
Study how sexuality is perceived, defined, and experienced in the context of society. Analyze the influence of sexuality on our lives, reflected in social norms, attitudes and beliefs, through public and private policies and practices, and social institutions.

SOCL 4312. Gender in Society. 3 Semester Credit Hours.
Examine socialization to sex roles, and the male/female differences in family, work, and political behavior. Special Emphasis on male/female inequality, effects of gender in education and religion, and current changes in sex role definitions.

SOCL 4313. Social Development and Change. 3 Semester Credit Hours.
Explore social processes and social problems as they are contained in the highly interdependent world system. Examine social change and development through historical, comparative, and critical perspectives. Analyze the problems of how and why societies and cultures around the world change, and evaluate whether those changes promote justice, equity, democracy, and development of human potential.

SOCL 4315. Social Science Statistics. 3 Semester Credit Hours.
Apply the elementary forms of statistical processes, including central tendency, variation, the normal curve and Z scores, analysis of variance, regression analysis, and correlations to social science data. Explore the role of statistics in social work, sociology, criminal justice, political science, and gerontology. SPSS is utilized for data analysis.

SOCL 4316. Methods of Sociological Research. 3 Semester Credit Hours.
(WI) Learn the principles and methods of social research, including research design, methods of observation, questionnaires, and interviews. Apply qualitative and quantitative techniques of inference, analysis, and research report writing, to gain practical experience in limited research studies.
SOCl 4317. Qualitative Methods. 3 Semester Credit Hours.
Introduces methodological approaches corresponding to qualitative research methods, with special emphases on interviewing, observation techniques, ethnographic field-based methods, and content analysis. Students are encouraged to take SOCI 4316 before or in conjunction with this course.

SOCl 4320. Social Psychology. 3 Semester Credit Hours.
Explore symbolic interactionism, and the influence of society, groups, culture, and other persons on the attitudes, behavior, and experiences of the individual.

SOCl 4388. Sociology Problems. 1-6 Semester Credit Hours.
Engage in independent reading, research and discussion on selected topics in sociology. Entry into this course will be arranged with the sociology counselor.

SOCl 4389. Special Topics in Sociology. 1-3 Semester Credit Hours.
Engage in independent reading, research, discussion, and paper writing under personal direction of instructor. Prerequisite(s): Senior standing or permission of department chair. May be taken more than once for credit if topics vary.

SOCl 5304. Sociology of Religion. 3 Semester Credit Hours.
An critical examination of religions and religious phenomena from the perspectives, theories, and methods of sociology. Reviews the major works of classical theorists such as Durkheim, Weber, and Marx, and recent theorists such as Berger and Stark.

SOCl 5305. Theoretical Sociology. 3 Semester Credit Hours.
Study the historical development of sociological theory by examining the major works of classical, contemporary, postmodern and modern social theorists.

SOCl 5388. Sociology Problems. 3 Semester Credit Hours.
Engage in independent reading, research, and discussion on selected topics in sociology, under the supervision of an instructor. May be repeated as topic varies for up to six hours of credit.

SOCl 5389. Special Topics in Sociology. 3 Semester Credit Hours.
Explore selected topics within sociology. May be repeated as topics vary.

Spanish (SPAN)
SPAN 3600. Spanish Readings. 6 Semester Credit Hours.
This course is designed to allow students to achieve reading proficiency in Spanish and will allow performance of research tasks relevant to a selected field of inquiry.

Special Education (SPED)
SPED 3361. Survey Exceptional Learners. 3 Semester Credit Hours.
Study characteristics and educational programs for individuals with disabilities. Examine the legislation and litigation related to special education and the referral, diagnosis, and placement of exceptional learners. A field experience is required. Co-requisite: Passing score on the THEA, ACCUPLACER, COMPASS, or ASSET.

SPED 4362. Special Education Rules and Regulations for Teacher. 3 Semester Credit Hours.
Analyze laws and litigation that affect the education of students with disabilities. Examine procedures pertinent to teachers providing special education services such as federal and state regulations, IEPs, and the development of basic instructional plans. Field experience required. Prerequisite(s): SPED 3361.

SPED 4363. Teaching Learners with Learning Disabilities. 3 Semester Credit Hours.
Analyze laws and litigation that affect the education of students with disabilities. Examine procedures pertinent to teachers providing special education services such as federal and state regulations, IEPs, and the development of basic instructional plans. Field experience required. Prerequisite(s): SPED 3361.

SPED 4364. Teaching Learners with Developmental Disabilities. 3 Semester Credit Hours.
Study the etiology and characteristics associated with deficits in development. Examine effects of developmental disabilities in the areas of language acquisition and physical, social and emotional functioning. Explore methods for teaching functional academic skills, communication skills and life management skills, working with parents, paraprofessionals and related service personnel, community based instruction and vocational planning. Field experience required. Prerequisite(s): SPED 3361.

SPED 4365. Behavioral Management for the Classroom. 3 Semester Credit Hours.
Explore managing a classroom that includes students with disabilities. Study positive interpersonal relationships in the classroom, increasing student motivation and learning, minimizing disruptive behavior, behavioral management strategies, curriculum adaptations, crisis management and behavior management theories and strategies. Also study typical characteristics associated with emotional disabilities and identification procedures utilized. Field experience required. Prerequisite(s): SPED 3361.

SPED 4366. Curriculum Modifications and Accommodations for General Education. 3 Semester Credit Hours.
Study methods and approaches for adapting educational processes for students with disabilities. Emphasis on specialized teaching methods, preparation of materials, use of technology for adapting instruction and developing modifications and accommodations for the general education curriculum. Field experience required.

SPED 4367. Programs For Young Children with Disabilities. 3 Semester Credit Hours.
Study young children with disabilities from birth to 6 years old, with an emphasis on the techniques for implementing programs to meet the needs of the child and the family. Learn early intervention, medical intervention, and public school educational programming for at-risk infants, toddlers, and young children, as well as parent involvement models to promote optimum parent-child and parent–professional relationships. Special emphasis on recent research related to early childhood special education. Field experience required. Prerequisite(s): SPED 3361.

SPED 4383. Teaching Learners with Learning and Behavior Anomalies. 3 Semester Credit Hours.
Learning disabilities, emotional disturbances, and behavior management are investigated as intertwining educational divisions. Histories, definitions, etiologies, and characteristics are examined in conjunction with teaching methods for academics and social skills as well as effective inclusive practices. Strategies for successful collaboration with parents and various educators are explored. Field experience is required. Prerequisite: SPED 3361.
SPED 4388. Special Education Problems. 1-3 Semester Credit Hours.
Study of selected problems in special education. Engage in independent research, reading and discussions under the personal direction of the instructor, topics may vary according to student need. Prerequisite(s): Junior or senior standing and admission to the Teacher Education Program and permission of the instructor and Curriculum and Instruction Program Coordinator.

SPED 5305. Introduction to Exceptional Learners. 3 Semester Credit Hours.
Study learner characteristics and an examination of instructional techniques that promote academic, personal, and social growth in exceptional learners also examination of the process and procedures relating to the services provided to learners with disabilities. Prerequisite(s): 18 hours of professional education, certification, or admission to the graduate teacher certification program.

SPED 5311. Behavioral Management in Special Education Environment. 3 Semester Credit Hours.
Study characteristics of students with emotional disabilities, including the application of behavioral management strategies appropriate for students with emotional and behavioral disabilities. Engage in functional assessments of behavior, development of behavior intervention plans, strategies for teaching appropriate behavior, crisis management strategies, and integrating behavior management with instructional programs in school, community and home settings. Prerequisite(s): Admission to the graduate teacher certification program.

SPED 5313. Advanced Study of Learning Disabilities. 3 Semester Credit Hours.
Study research on learning disabilities, including causation, diagnosis and educational programming. Learn methods for teaching students with learning disabilities, adapting general education classrooms to accommodate the inclusion of students with learning disabilities, and collaboration with parents, paraprofessionals and general education teachers. Prerequisite(s): Admission to the graduate teacher certification program.

SPED 5315. Advanced Study of Developmental Disabilities. 3 Semester Credit Hours.
Study research-based instructional methods appropriate for students with developmental disabilities. Learn assessment and teaching of functional academic skills, life management and communication skills, collaborating with parents, paraprofessionals, general education teachers and related service providers, community-based instruction, and vocational planning and preparation. Prerequisite(s): Admission to the graduate teacher certification program.

SPED 5325. Appraisal Exception for Learners. 3 Semester Credit Hours.
Analyze standardized assessments of the academic achievement of students referred for or currently receiving special education services, administer, score, analyze, report and plan programs according to results. Prerequisite(s): PSYC 5301 or concurrent enrollment or permission of Curriculum and Instruction Program Coordinator.

SPED 5327. Teaching Students with Severe and Profound Disabilities. 3 Semester Credit Hours.
Study definitions, characteristics, and instructional techniques for students with severe and profound disabilities, including functional assessment, applied behavioral analysis, Individualized Education Program (IEP) goals and objectives, and transition and placement issues. Prerequisite(s): SPED 5305 or permission of Curriculum and Instruction Chair.

SPED 5328. Case Management Education Diagnosticians. 3 Semester Credit Hours.
This course addresses state and federal laws that affect the diagnosis, placements, and programs for students with disabilities and the diagnostician's role and responsibilities as compliance officers. Enrollment limited to students admitted to the Diagnostician Certification Program or permission of Curriculum & Instruction Program Coordinator. Prerequisite(s): SPED 5325.

SPED 5329. Assessing Cognitive Abilities. 3 Semester Credit Hours.
Standardized assessment of the cognitive and adaptive behavior abilities of exceptional students. Includes test administration, scoring, analysis, and program planning. Prerequisite(s): PSYC 5381 or permission of Curriculum & Instruction Program Coordinator.

SPED 5384. Special Education Teaching Internship. 3 Semester Credit Hours.
A supervised, field-based experience in a special education classroom. Interns must demonstrate proficiency in applying effective teaching practices and classroom management strategies in a school classroom. Prerequisite(s): admission to a teacher certification program at TAMUCT; satisfactory performance in the professional development courses preceding the internship. May be repeated for credit. Field experience fee $75.

SPED 5385. Education Diagnostician Internship. 3 Semester Credit Hours.
Supervised professional activities for persons preparing for certification as an educational diagnostician. Professional activities will include test administration, scoring, analysis, diagnosis, report writing, and program planning. Interns will be required to demonstrate competence in the performance of professional duties as an educational diagnostician. A minimum of 300 hours of documented related professional activities will be required. Prerequisite(s): SPED 5305, SPED 5325 and SPED 5329 or permission of Curriculum & Instruction Program Coordinator. Field experience fee: $75.

SPED 5388. Special Education Problems. 1-3 Semester Credit Hours.
Open to graduate students who are capable of developing a problem independently. Problems are chosen by the student and approved in advance by the instructor and Division Director. Prerequisite(s): Full admission to the Graduate School and a graduate degree or certification program.