Academic Discourse Undergraduate

ADU 100 Orientation. This course is designed to provide an introduction to the Benedictine University community for international students. Students will become comfortable with key aspects of the academic culture and community of the University, will be provided with support and information for various aspects of academics and campus life, and will build confidence and skills through interaction with members of the Benedictine University community. Fall. Typically offered Fall Term. Consent Required.

ADU 101 Introduction to Academic Discourse. This course focuses on the development of reading, writing, and study skills for a range of academic purposes, disciplines, and audiences. Assessment of student work is by portfolio submission. Co-requisite: ADU 100. Fall. 3 semester hours. Consent Required.

ADU 102 Success in the American Classroom. This course integrates and extends academic discourse skills practiced in ADU 101, with a focus on longer writing assignments, oral presentation skills, and discipline-specific research and writing. Assessment of student work is by portfolio submission. Pre-requisites: ADU 100; ADU 101, or placement. Pre-requisite or co-requisite: WRIT 101 designated section or placement. Spring 3 semester hours. Typically offered Spring Term.

ADU 110 Introduction to Spoken Academic Discourse. This course focuses on developing advanced listening and speaking skills for a range of academic purposes, disciplines, and audiences. Assessment of student work is by portfolio submission. Pre- or co-requisite: ADU 100, or placement. Fall. 3 semester hours. Typically offered Fall Term. Consent Required.

ADU 111 Academic Skills Lab. Sequence of lab sessions designed to support and consolidate speaking and listening skills. Repeatable once for credit. Pre- or co-requisites: ADU 100; ADU 101 or WRIT 101 designated section, or placement. Periodically. 1.5 semester hours. Typically offered Spring Term, Even Years. Consent Required. Course Repeatable. Maximum number of units allowed 3.

ADU 112 Individual and Small Group Study Lab. Sequence of study groups and activities that support academic skills across the curriculum. Repeatable for credit. Pre-requisite or co-requisite: ADU 100, ADU 101 or WRIT 101 designated section or placement. Periodically. 1.5 semester hours. Course Repeatable. Maximum number of units allowed 90.

ADU 113 Self-Guided Skills Lab. Sequence of individual study sessions using on-line and other self-paced materials. Repeatable for credit. Pre- or co-requisites: ADU 100; ADU 101 or WRIT 101 designated section. Periodically. 1.5 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 90.

ADU 114 Advanced Academic Skills Lab. Sequence of study groups and activities that support advanced academic skills across the curriculum. Repeatable for credit. Pre- or co-requisites: ADU 100; ADU 101 or WRIT 101 designated section. Periodically. 1.5 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 90.

Accounting
ACCT 100  Fundamentals of Accounting for Decision Making.  This course is designed for non-business majors who would like to learn the basics of accounting. Students are introduced to fundamental accounting concepts and information. They will learn to apply and use accounting fundamentals to start and run their own business or non-profit organization and for their personal use. Students are introduced to fundamental accounting concepts and information. They will learn to apply and use accounting fundamentals to start and run their own business or non-profit organization and for their personal use. Yearly. 3 semester hours. Business Core Elective. Typically offered Annually.

ACCT 111  Accounting I. Principles of financial accounting; including the basic structure of accounting, accounting systems, and controls, the preparation and use of financial statements, and problems related to financial disclosures. Credit will not be granted for both ACCT 111 and ACCT 115. IAI BUS 903. Fall and Spring semesters. Prerequisite: Math 105 or Math 110 or coregistration in Math 105 or Math 110. 3 semester hours. Typically offered Fall and Spring Terms.

ACCT 112  Accounting II. Principles of managerial accounting; including cost accounting, planning and control systems, and analysis and interpretation of financial statements. IAI BUS 904. Fall and Spring semesters. Prerequisite: ACCT 111 3 semester hours. Typically offered Fall and Spring Terms.

ACCT 120  VITA Service Learning. A service learning course built around the Internal Revenue Service (IRS) volunteer income tax assistance (VITA) program. Students must participate in the training, successfully complete an IRS take-home exam, and participate in at least one volunteer income tax advising session. Prerequisite: Instructor or Department Chair consent. 1 semester hour. Course Repeatable. Maximum number of units allowed 3.

ACCT 211  Intermediate Accounting I. A thorough study of balance sheet accounts integrated with an analysis of their relationship to the income statement. Fall semester. Prerequisite: ACCT 111. 3 semester hours. Typically offered Fall Term.

ACCT 212  Intermediate Accounting II. A thorough study of balance sheet accounts integrated with an analysis of their relationship to the income statement. Spring semester. Prerequisite: ACCT 211 3 semester hours. Typically offered Spring Term.

ACCT 297  Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 12.

ACCT 310  Accounting Information Systems. Students will learn to analyze the role of accounting information systems within a company's operating systems; appreciate the wider view of accounting's role in an organization as an integrated and comprehensive database; and learn the connections between transaction cycles, internal controls, and computer ethics. Students will use accounting software to complete projects and study auditing of accounting information systems, databases and e-business. Sophomore standing. Fall-yearly. Cross listed with MIS 510. Pre-requisite: ACCT 111 and ACCT 112. 3 semester hours. Typically offered Fall Term.

ACCT 311  Cost Accounting. A comprehensive study of the methods of accounting for manufacturing operations with a special emphasis on profit planning and operating controls. Pre-requisite: ACCT 112. 3 semester hours.

ACCT 312  Federal Taxation. An introductory study of federal regulations covering income taxation of individuals and businesses. Fall semester. Prerequisite: ACCT 112 3 semester hours. Typically offered Fall Term.
ACCT 313 Auditing and Assurance Services. An intensive study of PCAOB auditing standards, generally accepted auditing standards and procedures. Fall semester. Prerequisite: ACCT 212  3 semester hours. Typically offered Fall Term.

ACCT 315 Advanced Accounting. A study of the accounting methods for consolidations, foreign subsidiaries, governmental organizations, non-profit entities, and partnerships. Spring semester. Prerequisite: ACCT 212  3 semester hours. Typically offered Spring Term.

ACCT 321 Forensic Accounting. A comprehensive study of forensic accounting topics. This course provides students of all majors, concentrations and level of study with a background in the field of forensic accounting - fundamentals, tools and accounting applications. Cross listed with MBA 606. Prerequisite: ACCT 111.  3 semester hours.

ACCT 322 Fraud Examination. An examination of schemes used by executives, managers, and employees to commit fraud against their organizations and the prevention, detection, and investigation strategies used to combat these schemes. Cross listed with MBA 607. Prerequisite: ACCT 321.  3 semester hours.

ACCT 323 Computer Fraud. This course provides an understanding of how fraud is accomplished by the use of computers and the Internet. It discusses the types of computer fraud that can occur in organizations and how computer fraud can be prevented. Cross listed with MBA 609. Prerequisite ACCT 321.  3 semester hours.

ACCT 324 Fraud and the Legal Environment. This course examines criminal theory relating to fraud, existing legislation governing fraud, and preparation of fraud cases in the court system. Cross listed with MBA 608. Prerequisite ACCT 321.  3 semester hours.

ACCT 380 Issues in Corporate Financial Reporting. An intensive and extensive study of corporate reporting to understand and evaluate the application of financial accounting theory and concepts. This course has a substantial accounting research component making up two-thirds of the course. Spring semester. Prerequisite: ACCT 212, senior standing.  3 semester hours. Typically offered Spring Term.

ACCT 391 Topics. Specially designed courses in various business topics to supplement the business curriculum. Prerequisite: Varies based upon the specific topic being explored. 3 semester hours.  Course Repeatable. Maximum number of units allowed 99.

ACCT 395 Independent Study. Provides an opportunity for an advanced student in the major to pursue study in a field of business related interest. Prerequisite: Consent of instructor. 1-3 semester hours.  Consent Required. Course Repeatable. Maximum number of units allowed 99.

American Studies

AMS 200 U.S. Cultural Studies. Incorporates elements of fiction and non-fiction in the study of various topics of race, gender and class in American Studies. Topics will vary. 3 semester hours.

Anthropology

ANTH 200 Cultural Anthropology. Study of the origins of mankind and culture. Development of human language, culture, and institutions, cross cultural analysis of societies, and cultures. IAI S1 901N.  3 semester hours. Anthro Core & Multi-Cultural.
ANTH 201  **Physical Anthropology.** Focuses on forces producing humans in their present form. The study of evolution, population genetics, and the fossil record. Periodically. Prerequisite: BIOL 197 or 198. 3 semester hours.

ANTH 207  **Contemporary Industrial Society.** This course examines the social and cultural make-up of advanced industrial societies in terms of technology, lifestyles, urbanism and environment. 3 semester hours.

ANTH 208  **The Anthropology of the Third World.** A study of developing nations. Analyzes the relationship between culture, environment, and society in economic spheres, emphasizing the Third World 3 semester hours. Anthropology Core Elective.

ANTH 210  **Peoples and Cultures of World Regions.** Alternating People/Cultures of Latin America, Africa and East Asia. 3 semester hours. Anthro Core & Multi-Cultural.

ANTH 290  **Social and Cultural Change.** Analysis of large scale historical change, the succession of types of societies and the emergence of the contemporary world. Evolution of social institutions (the family, religion) and speculation about significant future change. Annually. 3 semester hours. Typically offered Annually.

ANTH 291  **Topics in Anthropology.** Topics such as globalization, cultural survival of indigenous peoples, Native American cultures, development and readings in anthropology. Periodically. 3 semester hours. Typically offered Periodically.  *Course Repeatable. Maximum number of units allowed 3.*

ANTH 292  **Business Anthropology: Culture and International Business.** Introduction to the impact of cultural variation on the functional areas of business with emphasis on globalization and the development of the world system. 3 semester hours. Anthropology Core Elective.

ANTH 295  **Independent Study.** Directed readings, independent research, or student projects on areas of individual academic interest; topics, meeting times, and outcomes arranged with instructor. Prerequisite: Permission of the department or of the instructor. 3 semester hours.  *Consent Required.*

ANTH 309  **People, Culture & Environment.** The relationship between environment and social organization including subsistence activities, resource exploitation and development. 3 semester hours. Anthropology Core Elective.

ANTH 391  **Topics in Anthropology.** Topics such as globalization, cultural survival of indigenous peoples, Native American cultures, development and readings in anthropology. Periodically. 3 semester hours. Typically offered Periodically.

**Arabic**

ARBC 101  **Elementary Arabic I.** Introduction to the basic structure of the language. Designed to enable the student to develop oral proficiency and written skills. 3 semester hours. Typically offered Fall and Spring Terms.

ARBC 102  **Elementary Arabic II.** Introduction to the basic structure of the language. Designed to enable the student to develop oral proficiency and written skills. Spring. Pre-requisite: ARBC 101 or placement. 3 semester hours. Typically offered Fall and Spring Terms.
ARBC 191  Conversation and Culture.  This course provides an introduction to and highlights of Arabic culture and basic language skills. Spring term.  1 semester hour.  Typically offered Spring Term.

ARBC 201  Intermediate Arabic I.  Review of the basic structure of the language. Emphasis on extensive language practice in simulated cultural settings which will enable students to continue to develop their oral and written proficiency. Periodically.  Prerequisite: ARBC 102 or placement.  3 semester hours.

ARBC 202  Intermediate Arabic II.  Review of the basic structure of the language. Emphasis on extensive language practice in simulated cultural settings which will enable students to continue to develop their oral and written proficiency. Periodically.  Prerequisite: ARBC 201 or placement.  3 semester hours.

Astronomy

ASTR 105  Astronomy.  Examines astronomical phenomena and concepts including the solar system, start, galaxies, planetary motions, atoms and radiation and the origin and evolution of the universe.  4 semester hours.

Benedictine Beginnings

BENB 99  Benedictine Beginnings-Freshmen Success Seminar.  Mandatory 8 week seminar for all first year freshmen who are placed on academic probation. Students will examine classroom success strategies, participate in self exploration exercises, develop an understanding of University expectations, explore campus resources and practice effective communication techniques.  A framework will be built for future success not only as a student, but as a member of the Benedictine Community.  Pass/Fail.  Zero credit hours.  Offered spring, yearly.  Typically offered Spring Term.  Consent Required.

BENB 100  Benedictine Beginnings.  New Student Orientation

Bilingual Journalism

BIJR 150  Bilingual Journalism.  Introduction course in Bilingual Journalism.  A hands-on approach to teaching news editing for Spanish publications parallels Comm 150: Introduction to Communications.  3 semester hours.


Biochemistry

**BCHM 100  Impact of Science and Technology on Society.** Current scientific issues of personal and national interest, e.g. drugs, nutrition, energy, pollution, etc. Fall and Spring. 3 semester hours. Life Science Core Elective. Typically offered Fall and Spring Terms.

**BCHM 251  Introduction to Biochemistry.** The structures and functions of carbohydrates, lipids, proteins, and nucleic acids and their reactions in metabolic pathways. Restricted to Nutrition majors. Prerequisite CHEM 103. Fall. (Students cannot earn credit in BCHM 251 and BCHM/BIOL 261 or BCHM 361). 3 semester hours. Life Science Core Elective.

**BCHM 261  Principles of Biochemistry.** The structures and functions of carbohydrates, lipids, proteins, and nucleic acids and their reactions in metabolic pathways. (Students cannot earn credit in both BCHM 261 and 361). IAI CLS 910; NUR 910. Prerequisite: CHEM 247. Fall and Spring 3 semester hours. Life Science Core Elective. Typically offered Fall and Spring Terms.

**BCHM 290  Selected Topics in Biochemistry.** Current topics in Biochemistry. 1-3 semester hours. _Course Repeatable. Maximum number of units allowed 99._

**BCHM 292  Research Literature.** Discussion and application of online sources containing scientific publications and other information, e.g., SciFinder. The introduction of a report for a research project will be completed. 1 semester hour.

**BCHM 295  Biochemistry Teaching.** Opportunity for a student to work as a teaching assistant in the chemistry department. Fall, Spring, and Summer. Prerequisite: Department Consent Typically offered Fall, Spring, and Summer Terms. _Consent Required. Course Repeatable. Maximum number of units allowed 8._

**BCHM 361  Biochemistry.** The structure and function of the major chemical components of biological systems are described. The major topics include water, buffers and pH; proteins; enzymes; carbohydrates; lipids; and vitamins. Prerequisite: CHEM 247. Fall 3 semester hours. Life Science Core Elective. Typically offered Fall Term.

**BCHM 362  Protein Biochemistry Lab.** A laboratory course in which protein purification and characterization will be carried out. In addition some of the aspects of the structure and function of proteins and enzymes will be explored. This course is intended for biochemistry/molecular biology majors. Fall. Prerequisite: BIOL 260 and credit or co-registration in BCHM 361. 1 semester hour. Typically offered Fall Term.

**BCHM 365  Intermediary Metabolism.** The major metabolic pathways and cellular bioenergetics are discussed. An emphasis is placed upon the chemistry of these processes. Prerequisite: BCHM 361. Spring 3 semester hours. Typically offered Spring Term.

**BCHM 390  Selected Topics.** Current advanced topics in Biochemistry. 1-3 semester hours. _Course Repeatable. Maximum number of units allowed 99._

**BCHM 393  Biochemical Internship.** Practical experiences in biochemistry under the supervision of the program faculty. Each semester. Prerequisite: Consent of faculty coordinator. 1-6 semester hours. Typically offered Fall, Spring, and Summer Terms. _Consent Required. Course Repeatable. Maximum number of units allowed 12._
BCHM 398  Biochemical Research.  Required for all biochemistry/molecular biology majors. Original experimental research conducted under the supervision of a faculty or adjunct faculty member. Projects may be conducted on campus or at an affiliated research facility. Publication of the data in a scientific journal is a course objective. Prerequisite: Consent of Instructor. Fall, Spring, and Summer. 1-3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required.

Biology

BIOL 105  Physical Geography.  An introduction to hydrology and the physical processes operating in and on the planet earth. Topics of study will include ground and surface water, the hydrologic cycle, watershed models, groundwater recharge, geomorphology, tectonics, structural features, and geological processes relating to natural resource management, environmental processes and concerns. Periodically. 3 semester hours. Physical Science Core Elective.

BIOL 120  Genetics of Everyday Life.  Introduces the non-science major to the classical principles of genetics. Emphasis is on human genetic disease and genetic biotechnology including social, cultural and ethical implications. Periodically. 3 semester hours. Life Science Core Elective. Typically offered Periodically.

BIOL 130  The Search for Life in Outer Space.  Integration of biology and astronomy to address the provocative questions of whether we are alone in the universe, how life originated on earth and whether we can find or contact extraterrestrial life. Periodically. Intended for non-biology majors. 3 semester hours. Life Science Core Elective.


BIOL 140  Origins of Humanity.  Introduction to human evolution. Introduces the nonscience major to what the fossil record reveals, the place of humans in the natural world and the biological reasons for modern human physical variation. Periodically. 3 semester hours. Life Science Core Elective.

BIOL 150  Biology of Women.  Discusses biology of gender with special emphasis on the physical structure, function and health concerns of women. The intention is that both women and men understand the complex functioning of the female body and women's unique health issues. Intended for non-biology majors. Periodically. 3 semester hours. Life Science Core Elective.

BIOL 155  Anatomy and Physiology.  Integrated approach to structure and function of the human body. All the major organ systems will be studied. For physical education majors. Spring. Life Science Core. Pre-requisite: High School Biology and Chemistry. 4 semester hours. Typically offered Spring Term. Consent Required.

BIOL 160  Plagues and People.  This is a course for non-biology majors, as an introductory survey of microbiology that focuses on plagues and their effects on people. It introduces students to collegiate-level thinking and investigating issues in science and biology. Periodically. 3 semester hours. Life Science Core Elective.

BIOL 165  Wine Laboratory and Winery Operations.  This course will explore wine making, including all phases of small scale wine production and the biology and chemistry of wine and wine production. For nonscience majors. 3 semester hours. Life Science Core Elective. Typically offered Periodically.
BIOL 170 Animal Behavior. Exploration of animal behavior including how evolution, genetics and ecology play a role in animal diversity. Intended for non-biology majors. Periodically. 3 semester hours. Life Science Core Elective. Typically offered Periodically.

BIOL 175 Wild Chicago. This course explores the unique biodiversity of the Chicago Region by studying local plants, animals and habitats; investigates past and present negative ecological problems regarding regional natural areas, and delves into the endeavors made to reverse these ecological problems. For nonscience majors. 3 semester hours. Core Elective. Typically offered Periodically.

BIOL 180 The Ecology of a Changing Planet. Introduces the nonscience major to the basic ecological processes and science that are involved in many environmental concerns. Periodically. 3 semester hours. Life Science Core Elective.

BIOL 191 Selected Topics. Special topics in biology at an introductory level. Periodically. 1-3 semester hours. Life Science Core Elective. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.

BIOL 197 Principles of Organismal Biology. Key concepts in biology on which advanced courses will build. Includes development, reproduction, evolution and survey of the animal and plant kingdoms. Each semester. For science majors. 3 semester hours. Life Science Core Elective. Typically offered Fall and Spring Terms.

BIOL 198 Principles of Biology. Key concepts in biology on which advanced courses will build. Includes basic biological molecules, molecular biology, cell structure/function, transport processes, bioenergetics and genetics. Each semester. For science majors. 3 semester hours. Life Science Core Elective. Typically offered Fall, Spring, and Summer Terms.

BIOL 199 Principles of Biology Lab. Methods and techniques of laboratory investigation. Credit or co-registration in BIOL 198 or equivalent and “C” or better in MATH 110 or MATH 105 or Math 108 or above. Each semester. 1 semester hour. Life Science Core Elective. Typically offered Fall and Spring Terms.

BIOL 201 Physical Anthropology. Focuses on forces producing humans in their present form. The study of evolution, population genetics, and the fossil record. Periodically. Prerequisite: BIOL 197 or 198. 3 semester hours.

BIOL 203 Human Anatomy. Study of the structure of the human organism. Lecture and Lab. A biology major cannot receive credit for both BIOL 203 and 254. Each semester. IAI CLS 903; NUR 903. Prerequisite: BIOL 197 and 198. Fee: $130 4 semester hours. Typically offered Fall and Spring Terms.

BIOL 204 Advanced Botany. A detailed study of the plant kingdom using a morphological and anatomical approach. Labs will consist of microscope slide work, dissections and aspects of plant ecology and physiology. Each semester. Prerequisite: BIOL 197, 198 or 299 and CHEM 113. 3 semester hours. Typically offered Fall and Spring Terms.

BIOL 205 Environmental Science. A survey of environmental science with an emphasis on global concerns, biological and physical resources, resource use, conservation issues, and the interactions among science, society, and the environment. Fall. Prerequisite: BIOL 197 or 198. Cross listed BIOL 205/ENVS 205. 3 semester hours. Typically offered Fall Term.
BIOL 208  General Microbiology.  Comprehensive survey of the biology of microorganisms, especially bacteria. Includes topics in growth, metabolism, physiology, taxonomy, ecology and biotechnology. Lecture and lab. Each semester. IAI CLS 905; NUR 905. Prerequisite: BIOL 197, 198 and 199, or 299 and CHEM 104 or 123. 4 semester hours. Typically offered Fall and Spring Terms.

BIOL 210  OSHA Hazardous Waste Operation & Emergency Response Training.  Forty classroom hours of training in recognition, evaluation, and proper work practices dealing with hazardous materials and wastes in compliance with 29CFR 1910.120. Students passing the course will receive a certificate renewable every year allowing them to work on sites in compliance with the federal statute. There will be an extra certification fee associated with the course. Spring. 1 semester hour.  Consent Required.

BIOL 211  OSHA Hazardous Waste Operations and Emergency Response Training Refresher.  Eight classroom hours of training in the recognition, evaluation, and proper work practices dealing with hazardous materials and hazardous waste evaluation. The class is for the annual recertification in compliance with 29CFR 1910.120 for students who have passed ENVS-210 or who have current valid certification through other institutions. There will be an extra certification fee associated with the course. Prerequisite: ENVS 210. Spring. 1 semester hour.  Consent Required.

BIOL 224  Field Botany.  Identification and classification of native and naturalized flowering plants of Illinois. Periodically. Prerequisite: BIOL 197, 198, and 199 or 299. 3 semester hours.

BIOL 228  Vertebrate Embryology.  Developmental anatomy, genetics and physiology of vertebrates. Lecture and lab. Periodically.  Prerequisite: C or better in BIOL 197 and 198. 4 semester hours. Typically offered Periodically.

BIOL 229  Biostatistics.  A quantitative approach to biology; emphasis is on the design and analysis of biological experiments. Each semester. Prerequisites: MATH 110 or placement higher than 110, BIOL 197, 198, and 199 or 299 or NTSC 152. 3 semester hours. Typically offered Fall and Spring Terms.

BIOL 230  Plant-Soil Relationships.  Topics include effects of soil on plant growth and nutrition and how plants affect the soil. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 3 semester hours. Consent Required.

BIOL 249  Parasitology.  The morphology and life histories of animal parasites and their relation to the spreading of disease. Periodically. Prerequisite: BIOL 197 and 198. 3 semester hours. Typically offered Periodically.

BIOL 250  Genetics.  A survey course emphasizing Mendelian inheritance, molecular, cellular and medical genetics as well as current genetic research and its applications. Each semester. Prerequisite: BIOL 197 and 198 and CHEM 123. Sophomore Standing. 3 semester hours. Typically offered Fall and Spring Terms.

BIOL 251  Genetics Laboratory.  Designed to illustrate principles formulated in BIOL 250. Each semester. Prerequisite: Registration or credit in BIOL 250. 1 semester hour. Typically offered Fall and Spring Terms.

BIOL 254  Comparative Vertebrate Anatomy.  Comparative and phylogenetic study of the anatomy of vertebrates. Lab and museum work. Periodically. Prerequisite: BIOL 197 and 198. 4 semester hours. Typically offered Periodically.
BIOL 256 Comparative Animal Physiology. A study of basic life functions in animals emphasizing the mechanisms for maintenance of homeostasis in response to environmental factors such as water and dehydration, salts and ions, temperature, light, and daily and seasonal rhythms. May or may not be offered with lab. Periodically. Prerequisite: "C" or better in BIOL 197 & 198, and CHEM 103 or 123. 3-4 semester hours. Typically offered Periodically.

BIOL 258 Human Physiology. The study of the control and function of human organ systems. Lecture only. Each semester. IAI CLS 904; NUR 904. Pre-requisite: "C" or better in CHEM 103 or 123 and BIOL 197 & 198. 4 semester hours. Typically offered Fall and Spring Terms.

BIOL 259 Human Physiology Laboratory. Lab uses standard clinical equipment to illustrate principles of physiology. Each semester. IAI CLS 904; NUR 904. Prerequisite: Registration or credit in BIOL 258. 1 semester hour. Typically offered Fall and Spring Terms.

BIOL 260 Recombinant DNA Lab. Current techniques in manipulating DNA, such as PCR and subcloning, for expression of proteins. Gene product will be studied further in subsequent labs in the series. This lab is intended for Biochemistry/Molecular Biology majors. Spring. Prerequisite: Credit in BIOL 197 and 198; CHEM 123 and NTSC 152 or BIOL 199 or 299 and BIOL 250. 1 semester hour. Typically offered Spring Term.

BIOL 263 Tropical Ecology. A course on the composition and change in contemporary and historical tropical forests. Includes surveys of plants and animals and their interactions, and ecological concepts controlling biodiversity. Depending on the year, either Spring term on-campus lectures with local weekend field trip(s), or Summer term longer trip to site in Costa Rica. Periodically. Prerequisite: BIOL 197 and 198. 3 semester hours. Typically offered Spring and Summer Terms.


BIOL 272 Zoology. An organized presentation of the animal kingdom. The class emphasizes the structure of animal traits and how they help the animal function as an integral whole entity. A secondary goal is comparative anatomy of the animal classes. For nonscience majors. 3 semester hours. Typically offered Periodically.


BIOL 275 Invertebrate Zoology. Survey of major invertebrate animal groups through comparative study of their biodiversity, anatomy, physiology, development, and ecology. Focus on evolutionary relationships and importance of reproductive, development, feeding, mobility, skeletonization, bilaterality, cephalization, terrestrialization, parasitism, and carnivory. Fall. Pre-requisite: BIOL 197 and 198. 3 semester hours. Typically offered Periodically.

BIOL 279 Freshwater Ecology. Relationships between water, animals, plants and humans are investigated using the Shedd Aquarium as the laboratory. An introduction to the components of a freshwater habitat and a survey of the plants and animals that exist there, offered through the ACCA Cooperative College Program. Pre-requisite: BIOL 197 and 198. Instructor consent. Offered Fall, periodically. 3 semester hours. Typically offered Periodically. Consent Required.

BIOL 280 Marine Mammalogy. Classification, distribution, feeding habits, physiology anatomy and reproduction of marine mammals will be investigated using the Shedd Aquarium as the laboratory, offered through the ACCA Cooperative College Program. Fall periodically. Prerequisite: BIOL 197. Departmental consent. 3 semester hours. Consent Required.
BIOL 281 ACCA Seminar. Evening seminar dealing with advanced topics in biology. Topics are announced. Each semester. May be repeated. Prerequisite: Consent of instructor. 1 semester hour. Typically offered Fall and Spring Terms. Consent Required. Course Repeatable. Maximum number of units allowed 99.

BIOL 282 Vascular Plant Taxonomy. An introduction to the theory and practice of vascular plant classification. Field work and a personal collection are required. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 4 semester hours. Consent Required.

BIOL 283 Contemporary Ethnobotany. A study of the influence of plants on our economic, social and political history, and plants humans have chosen to protect and cultivate. Lab includes horticultural and identification work with economically important plants, and trips to plant conservatories. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 3 semester hours. Typically offered Periodically. Consent Required.

BIOL 284 Woody Plants of the Western Great Lakes Region. An introduction to the composition and identification of the woody flora of the western Great Lakes region. The impact of geology, climate and soils on the development of woody flora will also be considered. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 4 semester hours. Typically offered Periodically. Consent Required.

BIOL 285 Biology of Algae. An introduction to the algae, including the classification, structure and reproduction of major groups. Lab includes field collections and laboratory studies of local freshwater and soil algae. Practical applications in waste management, environmental monitoring and agriculture will be considered. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 4 semester hours. Typically offered Periodically. Consent Required.

BIOL 286 Biology of the Fungi. An introduction to the fungi; including classification, structure, ecology, and identification of the significant groups. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 4 semester hours. Typically offered Periodically. Consent Required.

BIOL 287 Plant Ecology. Examination of the structure/function relationships of plants to environmental factors, interrelationships of plant communities, laboratory and field techniques, and appropriate literature. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198. 4 semester hours. Typically offered Periodically. Consent Required.

BIOL 288 Medical Botany. Study of use of plants in medical practice and as sources of medicine. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. Prerequisite: BIOL 197 and 198 and CHEM 123. 3 semester hours. Consent Required.

BIOL 289 Plant/Animal Interactions. Studies the special ecological and evolutionary relationships between plants and animals (herbivory, pollination and seed dispersal). Includes natural history, experiments, theory and current research. ACCA Cooperative College Botany Program with the Morton Arboretum. Periodically. 4 semester hours. Consent Required.
BIOL 290  Marine and Island Ecology of the Bahamas. Exploration of habitats and animals found on and around the Bahamian Islands. Includes a nine-day field experience in the Bahamas. Course offered ACCA Cooperative College Program at the Shedd Aquarium. Spring. Pre-requisite: BIOL 197, 198 and 199 or 299. 4 semester hours. Typically offered Spring Term. Consent Required.

BIOL 291  Selected Topics. Special topics in biology chosen for the interests or needs of students. Periodically. Prerequisite: Consent of instructor. 1-4 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

BIOL 292  Biology Teaching. Opportunity for motivated students that have demonstrated excellent ability in theoretical aspects and practical techniques covered in prior laboratory coursework with experience to (1) assist in the teaching of an undergraduate laboratory science course, (2) grade assignments and tests, and (3) prepare reagents and equipment for laboratory use. Each semester. Prerequisite: Consent of instructor. Maximum of 2 credits allowed towards major. 1 semester hour. Typically offered Fall and Spring Terms. Consent Required. Course Repeatable. Maximum number of units allowed 9.

BIOL 295  Independent Study. Provides opportunity for advanced major to pursue study in a field of biological interest. Periodically. Prerequisite: Consent of instructor. 1-3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

BIOL 299  Quantitative Biology Laboratory for Transfer Students. Methods and techniques of biology laboratory investigation. Experimental design, data collection and statistical analysis, graphical representation of data, interpretation of results. Includes Biological Science Department orientation activities for transfer students. Credit may not be earned in BIOL 199 and BIOL 299 at Benedictine University. Each semester. Required for transfer students majoring in the biological sciences. 1 semester hour. Typically offered Fall and Spring Terms.

BIOL 300  Limnology. The study of the interrelations among the physical, chemical, and biological components of freshwater ecosystems. Includes taxonomy, adaptations, distributions, and abundance of aquatic organisms. Periodically. Prerequisite: BIOL 229, CHEM 124 or CHEM 236. Cross-listed ENVS / BIOL 300. 3 semester hours.

BIOL 301  Human Evolution. An in-depth look at the physical and behavioral evolution of humans. This course will focus primarily on the human fossil record from seven million years ago to the origin of Homo sapiens, with concentration on the functional anatomy of early humans. Pre-requisite: BIOL 201 or BIOL 203. Periodically. 3 semester hours.

BIOL 305  Environmental Toxicology. A study of the toxic effects of chemicals on human and ecological populations. Includes the physiological, genetic, and teratogenic effects of chemicals on humans and the study of biomagnification of chemicals through the food chain. Case studies and risk modeling using computers will be included to integrate theory and regulatory compliance. Periodically. Prerequisite: BIOL 256 or BIOL 258. Cross listed with ENVS / BIOL 305. 3 semester hours.
BIOL 310  **Physiological Modeling.** Biophysics and Physiological Modeling. Students will develop simple models that can be implemented in an Excel spreadsheet and compared with experimental or clinical data when available. Topics covered include drug elimination; distribution of O2, CO2 and glucose; osmosis and homeostasis of erythrocytes; fluid dynamics and blood flow; kinetics of motors, carriers, and RNA; membrane transport and drug delivery; diffusion of neurotransmitters; ion channel permeation and gating; ion channels and the action potential. Intended for Biology and Health Science Majors. Fall. Pre-requisites: PHYS 118 or 212 and CHEM 123 and MATH 111. 3 semester hours. Typically offered Fall Term.

BIOL 313  **Evolution.** A study of evolutionary processes, including Darwinian and non-Darwinian evolutionary theory, genetic mechanisms, social issues, and the role of natural selection in the formulation of species and higher categories. Emphasis is placed on the phylogeny of major animal groups and human evolution. Periodically. Prerequisite: BIOL 250. 3 semester hours. Typically offered Fall Term.

BIOL 319  **Histology.** The microscopic anatomy of the tissues and organs of vertebrates. Lecture and lab. Periodically. Prerequisite: "C" or better in BIOL 258. 4 semester hours. Typically offered Periodically.

BIOL 321  **Ornithology.** The basic biology, evolution, behavior, identification and ecology of birds. Laboratory, museum and field study 4 semester hours.

BIOL 322  **Paleobiology.** Using fossils to understand the evolutionary and ecological history of life. Topics such as mass extinctions, evolutionary diversifications, quantification of evolutionary rates, microevolution and speciation in the fossil record, evolutionary development, evolutionary transitions, fossilization, climate change, competition, functional morphology, conservation biology, and long-term trends in evolution and ecology are covered. Prerequisites: BIOL 204 or 229 or 275. Spring. 4 semester hours. Typically offered Spring Term.

BIOL 323  **Biophysics.** A calculus-based introduction to biophysical concepts and computational methods for science majors using Excel. The course is an integrated lecture and computer lab experience. Topics covered include membrane transport, equilibrium and the Nernst potential, properties of random walks and diffusion, and an introduction to molecular dynamics methods. (Students cannot earn credit in both BIOL/CHEM/PHYS 323 and BIOL 310). Prerequisites: CHEM 123, PHYS 118 or 212, MATH 211 or 221. Spring. Cross listed with BIOL/CHEM/PHYS 323. 4 semester hours. Typically offered Spring Term.

BIOL 325  **Biology of Complex Systems.** Survey of emergent and organizing principles in complex biological systems ranging from genomes and cells to tropical forests, including human systems via genomics, pharmacogenomics, cardiovascular biology, and behavior. Themes include structure of complex networks, scaling relations, phase transitions and self-organized criticality. Prerequisites: BIOL 250 or 340 and permission of instructor. Periodically. 3 semester hours. Typically offered Fall Term. Consent Required.

BIOL 333  **Plant Physiology.** The study of plant functions at all levels - molecular, cellular, organismic and environmental. Periodically. Prerequisite: BIOL 204 and CHEM 247 3 semester hours. Typically offered Periodically.

BIOL 340  **Cell Biology.** The study of life processes at the level of molecules, macromolecules, subcellular particles and organelles; integration of structure and function of living things on the suborganismic level. Each semester. Prerequisite: "C" or better in BIOL 250 and CHEM 243. 3 semester hours. Typically offered Fall and Spring Terms.
BIOL 341  Cell Molecular Biology Laboratory. Techniques in cell and molecular biology. Each semester. Prerequisite: BIOL 109 or 199; Registration or credit in BIOL 340. 1 semester hour. Writing Intensive Course. Typically offered Fall and Spring Terms.

BIOL 342  BMB Cell Biology Laboratory. Current techniques for studying cellular biology. Third lab in a 3-semester lab sequence intended for the BMB major. Prerequisite: Registration or credit in BIOL 340, credit in BCHM 362. Writing Intensive. Spring, yearly. 1 semester hour. Consent Required.


BIOL 354  Immunology. Includes structural and functional components of the immune system, as well as types and control of immune response. Each semester. BIOL 208 or BIOL 340. Cross-listed with CLSC 354. 3 semester hours.

BIOL 355  Cellular and Molecular Mechanisms of Human Disease I. Mechanisms of human disease that occur in the cardiovascular, lymphatic, pulmonary, renal and digestive systems. Pre-requisites: BIOL 340 or BIOL 258. Offered periodically. 3 semester hours. Typically offered Fall Term.

BIOL 356  Cellular and Molecular Mechanisms of Human Disease II. Mechanisms of human disease that occur in the neurological, endocrine, reproductive hematologic, musculoskeletal and integumentary systems. Offered periodically. Pre-requisites: BIOL 340 or BIOL 258. 3 semester hours. Typically offered Spring Term, Even Years.

BIOL 358  Exercise Physiology. Provides an in-depth overview of how the body's physiological, hormonal, and biochemical systems acutely and chronically respond to various forms of physical activity and environmental conditions in untrained and trained individuals. Each Semester. Prerequisite: BIOL 258 or a human physiology course. Cross-listed with EXPH 500. 3 semester hours. Typically offered Fall and Spring Terms.

BIOL 359  Pathophysiology. Integrates the pathological processes of human disease with those of the normal functioning body. Cellular and organisal disease mechanisms are studied with reference to specific diseases, with opportunity to apply this learning to actual case studies. Periodically. Prerequisites: "C" or better in BIOL 258 or 256. 3 semester hours. Typically offered Periodically.

BIOL 360  Endocrinology. A study of the structure and function of the endocrine system. Spring. Prerequisite: "C" or better in BIOL 258. CHEM 103 or BCHM 261 or BCHM 361 is strongly suggested. 3 semester hours. Typically offered Periodically.

BIOL 363  Ecology. Study of the relationships of organisms to one another and to their environment. Includes evolutionary, behavioral, population, community, ecosystem, and applied ecology. Each semester. Prerequisite: BIOL 205 or BIOL 250. 3 semester hours. Typically offered Fall and Spring Terms.

BIOL 364  Ecology Laboratory. A field and laboratory course designed to illustrate the principles of basic and applied ecology. Includes field trips, computer simulations, observational studies, and the design and implementation of ecological experiments. Each Semester. Prerequisite: BIOL 229, Credit or co-registration in BIOL 363. 1 semester hour. Writing Intensive Course. Typically offered Fall and Spring Terms.
BIOL 365  Molecular Pharmacology. A course introducing students to the molecular foundations of drug action with an emphasis on molecular structure-function relationships. Includes receptor-ligand interactions, agonists and antagonists, and signal transduction pathways. Pre-requisite: "C" or better in CHEM 247 and BIOL 340 or BIOL 258. BCHM 261 is suggested. Fall. 3 semester hours. Typically offered Fall Term.

BIOL 366  Medical Genetics. An advanced course in which the principles of genetics are applied and explored in clinical and other human settings. Problems in dysmorphology, inborn errors of metabolism, consanguinity, cancer etiology, pregnancy loss, prenatal diagnosis, gene therapy, genetic counseling and ethical issues are explored. Prerequisite: "C" or better in BIOL 250. Periodically. 3 semester hours.

BIOL 367  Human Embryology. Study of human development from gametogenesis through the neonatal period, including development after delivery. Topics include medical genetics, morphogenesis, normal and abnormal development processes and the role of environment in prenatal development. Periodically. Prerequisite: BIOL 203 or BIOL 250. 3 semester hours. Typically offered Periodically.

BIOL 368  Biomechanics. Principles from the fields of physics, engineering, anatomy and physiology are used to analyze motion of the human body and to describe the forces acting upon the various body segments during normal daily activities. Prerequisite: BIOL 203 and MATH 111. Spring. 3 semester hours.

BIOL 369  Neurobiology. Introduction to the nervous system including the human brain and its specialized functions. Topics covered include pathophysiology of the brain, how and why psychotic and other drugs affect the nervous system, and how and why memories are formed. Periodically. 3 semester hours. Typically offered Periodically.

BIOL 370  Animal Behavior. A study of how and why animals act and react in their environment, with an emphasis on the evolutionary and ecological aspects. Topics covered include neural mechanisms of behavior, learning, game theory, foraging, communication, reproductive behavior and mating systems, and social behavior. Prerequisite: BIOL 250 and BIOL 256 or BIOL 258. Periodically. 3 semester hours.

BIOL 371  Molecular Biology. An advanced study of mechanisms controlling gene and genome organization, expression, regulation, and evolution. Includes viral, prokaryotic, and eukaryotic systems. Readings from the primary literature are used to integrate concepts and methods of data generation and analysis. Fall. Prerequisite: BIOL 340. 3 semester hours. Typically offered Fall Term.

BIOL 372  Genomics and Bioinformatics. A survey of the fields of genomics, proteomics, and metabolomics with an emphasis on using bioinformatics resources and understanding the computational and mathematical basis behind many of the tools used for data mining and analysis. Spring. Prerequisite: BIOL-340 and MATH-221 or MATH 211. 2 semester hours. Typically offered Spring Term.

BIOL 373  Tropical Ecology. A course on the composition and change in contemporary and historical tropical forests. Includes surveys of plants and animals and their interactions, and ecological concepts controlling biodiversity. Depending on the year, either Spring term on-campus lectures with local weekend field trip(s), or Summer term longer trip to site in Costa Rica. Periodically. Prerequisite: BIOL 197 and 198. 3 semester hours. Typically offered Spring and Summer Terms.
BIOL 374  Research Techniques in Molecular Biology.  A laboratory course designed to acquaint the student with research methodologies and instrumentation in molecular biology.  Periodically. Prerequisite: BIOL 341, Consent of instructor. 1-3 semester hours. Typically offered Fall and Spring Terms. Consent Required.

BIOL 375  Research Techniques in Field Ecology.  A hands-on field experience designed to acquaint students with research methodologies in ecology. Project required. Periodically. Prerequisite: BIOL 363 and BIOL 364. 1-2 semester hours. Typically offered Fall and Spring Terms.

BIOL 380  Advanced Topics in Biology.  A comprehensive study of some selected topic or area in a particular field of biology. Topics will be announced. This course may be repeated once for a maximum of two hours of credit. Periodically. Prerequisite: Consent of instructor and senior standing. 1-2 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 2.

BIOL 389  Biological Research.  Research projects which require extensive use of laboratory or museum facilities. Each semester and summer. Prerequisite: Consent of instructor. 1-3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required. Course Repeatable. Maximum number of units allowed 9.

BIOL 391  Selected Topics.  Special courses on various topics with which the student has not become acquainted in formal course work. May be an extension of or a supplement to material previously encountered, or lectures from a completely new area. Periodically. 1-4 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

BIOL 393  Great Ideas in Biology and Medicine.  A study in the original writings of some of the great biologists and medical scientists to understand their thoughts and work. Capstone course for HLSC majors. Sophomore Standing. Fall and Spring. 1 semester hour. Writing Intensive Course. Typically offered Fall and Spring Terms.

BIOL 394  Nature Writing.  This course will introduce the literary genre of Nature Writing and explore its ongoing relationship with science. This interdisciplinary course will explore the nature writing of the past and other cultures, as well as trends leading to its future. May be taken as the capstone course for HLSC majors. 1 semester hour. Writing Intensive Course. Typically offered Annually.

BIOL 395  Independent Study.  Provides opportunity for advanced major to pursue study in a field of biological interest. Periodically. Prerequisite: Consent of instructor. 1-3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

BIOL 397  Biology Internship.  Practical experiences in the life sciences under the supervision of the biology faculty. Prerequisite: Consent of Instructor. Periodically. 1-3 semester hours. Consent Required.

Bus

BUS 305  Operations Management.  IIT course. 3 semester hours. Consent Required.

Business with Science Applications
BSCI 200  Introduction to Science Management.  Introduction to Science Management course objectives are: to provide an overview of science management functional areas and how they work in science based industries; to introduce managers from various industries to compare/contrast functional expectations in the context of contemporary industry practices, including: overview of science management and industry; comparison and contrasts between scientific research (to discover knowledge) and business research (to produce value); introduction to finance in scientific companies (discovering valuable solutions and protecting that value in the competitive marketplace); comparing/contrasting the scientific with business research and development cycle; comparing/contrasting the role of the general business manager with other scientific related managers, including: scientific research project manager; development manager; start up CEO, human resources manager; accounting manager; production manager, health and safety manager; marketing manager; regulatory manager; business development manager, purchasing/supply chain manager. Annually. 3 semester hours. Typically offered Annually. Consent Required.

BSCI 210  Science Management: Legal Aspects.  Introduces students to at least four different applications of legal and regulatory requirements in scientific industries, including: introduction to intellectual property, patents, corporate intellectual property strategy, and negotiation approaches to corporate intellectual property strategy. Annually. 3 semester hours. Typically offered Annually. Consent Required.

BSCI 220  Science Management: Innovation and Product Development.  Innovation and Product Development provides an introduction to the critical skills for effective product development through teams, in the context of the highly professionalized nature of scientific industries. Fall. 3 semester hours. Consent Required.

BSCI 230  Science Management: Ethical and Quality Systems.  Ethical and Quality Systems provides an introduction to the fundamental requirements for ethical practice and quality in scientific industries, from both the personal and organizational perspectives. Annually. 3 semester hours. Consent Required.

BSCI 240  Science Management: Project Team Management.  Provides an introduction to the unique challenges and successful practices of scientific team management, from both personal and organizational perspectives. Annually. 3 semester hours. Consent Required.

BSCI 297  Internship.  BSCI 297 Internship provides an internship in a regional scientific organizational setting, to apply and develop program concepts and skills. Spring and Summer. 1-3 semester hours. Consent Required.

BSCI 380  Capstone.  Capstone provides each student a comprehensive research project and team based presentation, with professional external review and feedback on the student's business, scientific and communication skills. Senior Standing. Spring. 3 semester hours. Consent Required.

Chemistry

CHEM 101  Introduction to Chemistry.  The fundamental principles of chemistry with an introduction to inorganic chemistry; including acids, bases, gases, and solutions. Intended for nursing and allied health majors. Fall. IAI P1 902. 3 semester hours. Physical Science Core Elective. Typically offered Fall Term.

CHEM 102  Introduction to Chemistry Laboratory.  Experiments that explore the principles discussed in CHEM 101. Fall. IAI P1 902L. Prerequisite: Registration or credit in CHEM 101. 1 semester hour. Physical Science Core Elective. Typically offered Fall Term.
CHEM 103 Introduction to Organic Chemistry and Biochemistry. The structure, nomenclature, and reactions of organic compounds and a brief introduction to biochemistry. Spring. IAI P1 904. Prerequisite: CHEM 101 or CHEM 123. 3 semester hours. Physical Science Core Elective. Typically offered Spring Term.

CHEM 104 Introduction to Organic Chemistry and Biochemistry Laboratory. Experiments examine the applications of organic and biochemical theory. Spring. IAI P1 904L. Prerequisite: Registration or Credit in CHEM 103. 1 semester hour. Physical Science Core Elective. Typically offered Spring Term.

CHEM 107 Chemistry: An Experimental Science. Lecture and laboratory component. Develop chemical principles, such as acid-base, kinetics, thermodynamics, and periodicity through observation, demonstration, and experimentation. Designed for education, humanities, and social science majors. Periodically. 3 semester hours. Physical Science Core Elective. Typically offered Periodically.

CHEM 113 General Chemistry I. Principles of stoichiometry, aqueous reactions, thermochemistry, gas laws, electronic structure and bonding, periodicity, phase-related properties and functional groups. IAI P1 902; BIO 906; EGR 961; CHM 911; CLS 906. Fall, Spring, Summer. Prerequisite: "C" or higher in MATH 110 or placement into MATH 111 or higher and one year of high school chemistry or CHEM 101. 3 semester hours. Physical Science Core Elective. Typically offered Fall, Spring, and Summer Terms.

CHEM 114 General Chemistry I Laboratory. Separations, quantitative measurements and transfers, and spectrochemical techniques involving organic and inorganic systems. IAI P1 902L; BIO 906; EGR 961; CHM 911; CLS 906. Fall, Summer. Prerequisite: Registration or credit in CHEM 113. 1 semester hour. Physical Science Core Elective. Typically offered Fall, Spring, and Summer Terms.

CHEM 115 General Chemistry I Laboratory. Intended for chemistry majors or students interested in chemistry or biochemistry. The study and application of laboratory techniques and methods of chemical/biochemical analysis that includes a variety of chromatographic and spectroscopic methods, titrimetry, and sample preparation, data acquisition and statistical analysis, molecular modeling, laboratory safety, and scientific ethics. IAI CHM 911. Fall. Prerequisite: Credit or co-registration in CHEM 113, Department Consent 1 semester hour. Typically offered Fall Term. Consent Required.

CHEM 123 General Chemistry II. Principles of intermolecular forces, kinetics, chemical equilibrium, acid/base chemistry, electrochemistry, and nuclear chemistry. IAI BIO 907; CHM 912; CLS 907; EGR 962. Spring and Summer. Prerequisite: CHEM 113. 3 semester hours. Physical Science Core Elective. Typically offered Spring and Summer Terms.

CHEM 124 General Chemistry II Laboratory. Titrimetry, solubility, synthesis, qualitative analysis, and instrumentation for pH, kinetics, and electrochemical processes. IAI BIO 907; CHM 912; CLS 907; EGR 962. Spring and Summer. Prerequisite: CHEM 114 or CHEM 115 or NTSC 151 and co-registration or credit in CHEM 123. 1 semester hour. Physical Science Core Elective. Typically offered Spring and Summer Terms.

CHEM 125 General Chemistry II Laboratory. Completion of the topics listed for CHEM 115 and pH, electrochemistry, equilibrium, and inorganic synthesis. IAI CHM 912. Spring. Prerequisite: CHEM 115 and credit or co-registration in CHEM 123, Department Consent 1 semester hour. Physical Science Core Elective. Typically offered Spring Term. Consent Required.

CHEM 235 Chemical Analysis I. Statistical analysis of data, and the theory and applications of instrumental analysis including spectroscopy, chemical separations, and mass spectrometry. Lab includes optimization, operation and applications of selected instrumental methods discussed in lecture. Fall. Prerequisite: CHEM 123 and CHEM 124, or CHEM 125 or NTSC 152. 4 semester hours. Typically offered Fall Term. Consent Required.

CHEM 236 Chemical Analysis II. Sampling and the theory and applications of gravimetric, titrimetric, electrochemical, thermal, automated and computer assisted methods of analysis. Laboratory includes quantitative analysis procedures that exemplify lecture topics. Spring. Prerequisite: CHEM 235. 4 semester hours. Typically offered Spring Term.

CHEM 242 Organic Chemistry I. Introduction to cyclic and acyclic molecules, with an emphasis on organic acids and bases, reaction mechanisms and stereochemistry. Intended for physical and biological science students. Fall and Summer. IAI BIO 908; CHM 913; EGR 963. Prerequisite: CHEM 123. 3 semester hours. Typically offered Fall and Summer Terms.

CHEM 243 Organic Chemistry I Laboratory. Introduction to organic and biochemical laboratory techniques, separations, purifications and analysis. For non-chemistry majors. Fall and Summer. IAI BIO 908; CHM 913; EGR 963. Prerequisite: CHEM 124 or CHEM 125 or NTSC 152 and Credit or co-registration in CHEM 242. 1 semester hour. Typically offered Fall and Summer Terms.

CHEM 244 Organic Chemistry I Laboratory. Introduction to organic and biochemical laboratory techniques, separations and purifications, with an emphasis on spectroscopic analysis. Intended for chemistry and biochemistry/molecular biology majors. IAI CHM 913. Fall. Prerequisite: CHEM 124 or 125 or NTSC 152, Credit or co-registration in CHEM 242 and Department Consent 1 semester hour. Typically offered Fall Term. Consent Required.

CHEM 247 Organic Chemistry II. Organic synthesis. A study of the preparations and reactions of aliphatic and aromatic organic compounds and their inter-conversions. Spring and Summer. IAI BIO 909; CHM 914; EGR 964. Prerequisite: CHEM 242. 3 semester hours. Typically offered Spring and Summer Terms.

CHEM 248 Organic Chemistry II Laboratory. The synthesis, isolation and identification of organic compounds. For non-chemistry majors. Spring and Summer. IAI BIO 909; CHM 914; EGR 964. Prerequisite: CHEM 243 and credit or co-registration in CHEM 247. 1 semester hour. Typically offered Spring and Summer Terms.

CHEM 249 Organic Chemistry II Laboratory. The synthesis, isolation and identification of organic compounds with an emphasis on spectroscopic analysis. For chemistry and biochemistry/molecular biology majors. IAI CHM 914. Spring. Prerequisite: CHEM 243 or 244 and credit or co-registration in CHEM 247, and Department Consent 1 semester hour. Typically offered Spring Term. Consent Required.


CHEM 292 Research Literature. Discussion and application of online sources containing scientific publications and other information, e.g., SciFinder. The introduction of a report for a research project will be completed. 1 semester hour. Typically offered Spring Term.

CHEM 295 Chemistry Teaching. Opportunity for a student to work as a teaching assistant in the chemistry department. Fall, Spring, and Summer. Prerequisite: Department Consent 1-3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required. Course Repeatable. Maximum number of units allowed 99.
CHEM 313 Classical Thermodynamics. Properties of gases, relating heat and work, concepts of enthalpy and entropy, heat engines, mixtures, and phase changes. Fall. Prerequisite: CHEM 123, PHYS 118 or 212, and Math 212. Cross listed with CHEM / PHYS 313. 3 semester hours. Typically offered Fall Term.

CHEM 314 Physical Chemistry I Laboratory. Applies principles discussed in CHEM 313. Fall. Prerequisite: Registration or credit in CHEM 313. 1 semester hour. Writing Intensive Course. Typically offered Fall Term.

CHEM 315 Quantum and Statistical Mechanics. Failures of classical physics, development of quantum theory, atomic structure and spectra, statistical mechanics, and statistical thermodynamics. Spring. Prerequisites: PHYS 313 and credit/co-registration in Math 260 or 300. Cross listed with CHEM / PHYS 315. 3 semester hours. Typically offered Spring Term.

CHEM 316 Physical Chemistry II Laboratory. Applies principles discussed in CHEM 315. Spring. Prerequisite: Credit or co-registration in CHEM / PHYS 315. Cross listed with CHEM / PHYS 316. 1 semester hour. Writing Intensive Course. Typically offered Spring Term.

CHEM 320 Inorganic Chemistry. Principles of structure and bonding, coordination chemistry, organometallic chemistry, and descriptive chemistry. Fall. Prerequisite: CHEM 236 and 247. 3 semester hours. Typically offered Fall Term.

CHEM 321 Inorganic Synthesis Laboratory. Applications of the topics discussed in CHEM 320 including vacuum-line manipulation, inert atmosphere techniques, spectroscopy, and separation methods. Spring, alternate years. Prerequisite: CHEM 320, Department Consent 1 semester hour. Writing Intensive Course. Consent Required.

CHEM 322 Bioinorganic Chemistry. Selected lecture topics include transition metals in biological systems, metals in photosynthesis, metal homeostasis, inorganic compounds in medicine, spectroscopy, and biological coordination compounds. Pre-req: CHEM 236 and CHEM 247. Offered: Spring, periodically. 3 semester hours. Typically offered Periodically.

CHEM 323 Biophysics. A calculus-based introduction to biophysical concepts and computational methods for science majors using Excel. The course is an integrated lecture and computer lab experience. Topics covered include membrane transport, equilibrium and the Nernst potential, properties of random walks and diffusion, and an introduction to molecular dynamics methods. (Students cannot earn credit in both BIOL/CHEM/PHYS 323 and BIOL 310). Prerequisites: CHEM 123, PHYS 118 or 212, MATH 211 or 221. Spring. Cross listed with BIOL/CHEM/PHYS 323. 4 semester hours. Typically offered Spring Term.

CHEM 334 Bioanalytical Chemistry and Chemical Sensors. Selected lecture topics in spectroscopy, X-ray crystallography, and electrochemistry of biological macromolecules; immunoassays, and development and optimization of biological/chemical sensors. Periodically. CHEM 235 and 247 3 semester hours. Typically offered Periodically.

CHEM 335 Advanced Chemical and Instrumental Analysis. Selected topics in spectroscopy, separations, ionic equilibria, electrochemistry, statistical analysis, and computer-aided instrument control, data acquisition and processing. Periodically. Prerequisite: CHEM 236 and 247. 3 semester hours. Typically offered Periodically.
CHEM 340  Advanced Organic Chemistry. Selected topics in synthetic organic chemistry, emphasizing current reaction methodologies, catalysis and asymmetric transformations. Periodically. Prerequisite: CHEM 235 and 247. 3 semester hours. Typically offered Periodically.

CHEM 357  Molecular Dynamics and Kinetics. Electronic properties of molecules, molecular interactions, molecular motion, chemical kinetics, molecular reaction dynamics. Periodically. Prerequisite: Credit or Co-registration: CHEM 315 or PHYS 315. Cross listed with PHYS 357. 3 semester hours.


CHEM 393  Chemical Internship. Practical experiences in chemistry under the supervision of the chemistry program. Prerequisite: Department Consent 1-6 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 6.

CHEM 398  Chemical Research. Original experimental research conducted under the supervision of a faculty or adjunct faculty member. Projects may be conducted on campus or at an affiliated research facility. Publication of the data is a course objective. Fall, Spring, and Summer. Prerequisite: Consent of Instructor. 1-3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required. Course Repeatable. Maximum number of units allowed 99.

Chinese

CHIN 101  Elementary Mandarin I. Introduction to the basic structures of the language. Designed to enable the student to develop oral proficiency and written skills. Fall. 3 semester hours.

CHIN 102  Elementary Mandarin II. Introduction to the basic structures of the language. Designed to enable the student to develop oral proficiency and written skills. Spring. Prerequisites-CHIN 101 or placement. 3 semester hours.

CHIN 191  Conversation and Culture. This course provides an introduction to and highlights of Chinese culture and basic language skills. Spring semester 1 semester hour. Typically offered Spring Term.

CHIN 201  Intermediate Mandarin I. Review of the basic structure of the language. Emphasis on extensive language practice in simulated cultural settings which will enable students to continue to develop their oral and written proficiency. Fall. Pre-requisite: CHIN 102 or placement. 3 semester hours.

CHIN 202  Intermediate Mandarin II. 3 semester hours.

CHIN 211  Intermediate Grammar and Composition. Comprehensive review and synthesis of Chinese (Mandarin) grammar and writing practice. Pre-requisite: CHIN 202 or placement by Department. Offered periodically. 3 semester hours. Typically offered Periodically.

CHIN 291  Topics. Selected topics. 1-3 semester hours.

Clinical Laboratory Sciences
CLSC 354 Immunology. Includes structural and functional components of the immune system, as well as types and control of immune response. Each semester. Prerequisite: BIOL 208 or BIOL 340. 3 semester hours. Typically offered Spring Term.

CLSC 390 Hematology. Study of blood and bone marrow cells including the enumeration, identification, and classification of these cells. Comparison of normal structure and function versus the abnormal and malignant states in platelet, red cell, and white cells series. Includes lab. Prerequisite: Consent of instructor. 5 semester hours. Consent Required.

CLSC 391 Clinical Microbiology. The various culture techniques involved in identification of normal human flora, the study and isolation techniques of aerobic and anaerobic pathogens, and their relationship to disease. Includes lab. Prerequisite: Consent of instructor. 6 semester hours. Consent Required.

CLSC 392 Clinical Biochemistry. The application of the principles of medical biochemistry and physiology related to the methodology and evaluation of clinical chemistry procedures. The correlation of chemistry data to disease manifestations. Includes lab. Prerequisite: Consent of instructor. 8 semester hours. Consent Required.

CLSC 393 Immunology/Serology. Study of the principles and procedures involved in the humoral-and cell-mediated reaction in normal and abnormal states; including deficiency states, infectious states, autoimmune disease and transplantation. Includes lab. Prerequisite: Consent of instructor. 3 semester hours. Consent Required.

CLSC 394 Blood Banking. Study of the many human blood antigens and antibodies, their identification by various standard techniques, cross-matching for transfusions and component therapy. Procurement and preparation of blood products and dispensing. Includes lab. Prerequisite: Consent of instructor. 4 semester hours. Consent Required.

CLSC 395 Clinical Microscopy/Urinalysis. Study of principles and procedures of qualitative and quantitative urinalysis as related to renal function in health and disease. Use of urinalysis as a diagnostic tool in endocrinologic function. Includes lab. Prerequisite: Consent of instructor. 2 semester hours. Consent Required.

CLSC 396 Coagulation. Study of the coagulation mechanisms found in the normal and disease states, coagulation testing procedures, and their use in diagnosing hemorrhagic diseases. Includes lab. Prerequisite: Consent of instructor. 2 semester hours. Consent Required.

CLSC 397 Special Topics. Designed to broaden the background of the medical technology students. Prerequisite: Consent of instructor. 2 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 4.

Communications

COMM 150 Introduction to Communication Arts. A writing and speaking-intensive introduction to communication arts theory and research, with an emphasis on analyzing mass media messages and understanding their underlying cultural and historical contexts. 3 semester hours. Writing Intensive Course.

COMM 207 Editing for Publications. Introduction to the principles and practices of editing for books, magazines, and newspapers. Prerequisite: Writ 102 or 103 or HNRS 190 3 semester hours.
COMM 208  Layout and Design for Publication.  Graphic design principles and professional processes are emphasized. Print projects may include organizational identity, response, advertising, newsletter, book/magazine, and other projects, using Quark Xpress. Online design principles are introduced to enable design of a simple website.  3 semester hours.

COMM 209  Newswriting and Reporting.  Principles and practice in gathering and writing news as well as preparing copy for publication.  Fall.  IAI MC 919.  Prerequisite: WRIT 101.  3 semester hours. Writing Intensive Course.

COMM 235  Photojournalism.  Photojournalism-new course fall 2011  3 semester hours.

COMM 250  Masters of the American Cinema.  A historical study of representative fiction film makers from D.W. Griffith to Spike Lee.  IAI F2 908.  3 semester hours. Communications Core Elective.

COMM 251  History of Film.  A cross-cultural study of the development of the cinema from its late 19th century origins to the present.  IAI F2 909.  3 semester hours. Communications Core Elective.

COMM 252  Technical Writing.  A practical course designed to train students for various fields that require technical writing skills - engineering, computer science, industry, etc.  3 semester hours.

COMM 253  Public Relations Writing.  Focuses on writing for print media. Students prepare news releases, newsletters and feature stories.  Fall.  Prerequisite: WRIT 102 or 103 or HNRS 190  3 semester hours. Typically offered Fall Term.

COMM 254  Writing for the Electronic Media.  A practical course designed to expose students to the various approaches, forms and techniques of writing for the electronic media.  IAI MC 917.  Prerequisite: WRIT 102 or 103 or HNRS 190  3 semester hours.

COMM 255  Television Production.  Laboratory course introducing students to the technical and aesthetic principles utilized in preparing programming for television.  Fall.  IAI MC 916.  Fee: $45  3 semester hours. Typically offered Fall Term.

COMM 256  International Film.  A study of the film form as seen in the most important films produced outside the United States. Periodically.  3 semester hours. Communications Core Elective. Typically offered Periodically.

COMM 263  Advertising Copywriting.  Covers the fundamentals of writing copy and designing advertising for all forms of print and electronic media. Periodically. Prerequisite: WRIT 101  3 semester hours. Typically offered Periodically.

COMM 264  Sports Journalism.  This course is designed for students to adapt skills learned in COMM 209 toward a variety of sports environments and applications. The students will write press releases and do hard news reporting, and be informed of the inner workings of the sports communication environment.  3 semester hours.

COMM 265  Sports Broadcasting.  Students will apply basic skills learned in Comm 254/255 to a variety of video and multimedia applications. Emphasis will be on writing effective sports stories, conducting professional-looking standups, and covering the sports beats on campus. Students will also produce a half-hour sports cable show.  3 semester hours.

COMM 291  Topics.  Study of aspects of communication on the intermediate level not listed as regular course offerings. May be repeated. Prerequisite: WRIT 102  3 semester hours.  Course Repeatable. Maximum number of units allowed 99.
COMM 295  Independent Study. Designed for the student who wishes to explore aspects of communications not normally offered in the regular curriculum. May be repeated. Prerequisite: Approval of department chair. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

COMM 297  Internship. Practical experience in public relations, electronic media, journalism, advertising or multimedia supervised by the Communication Arts department. Up to three internship hours may be applied toward the 39 hour major requirement. Up to 12 hours may apply toward the 120 hours for graduation. Prerequisite: Consent of internship coordinator, department chair, and at least 3.0 G.P.A. 2-6 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 12.

COMM 309  Global Journalism. Students will gain the skills needed to cover news stories in a foreign country along with the ability to analyze global media content. Department consent required. Offered yearly, spring term. 3 semester hours. Typically offered Spring Term. Consent Required.

COMM 316  Advanced Television Production. Emphasis on development of directing and post-production skills, with focus on aesthetic and technical principles. Spring. Prerequisite: COMM 254 and COMM 255. 3 semester hours. Communications Core Elective. Typically offered Spring Term.

COMM 317  Mass Media Law and Ethics. Examines the many legal and ethical issues related to the mass media. Fall. Prerequisite: WRIT 102 or HNRS 191. 3 semester hours. Typically offered Fall Term.

COMM 335  Photojournalism. Teaches the skills in creating and evaluating images for photojournalism purposes. 3 semester hours.

COMM 337  Advanced Journalism Writing. Students practice the major styles of journalistic writing beyond newswriting: public affairs reporting, feature writing, magazine writing and editorial writing. Periodically. Prerequisite: COMM 209. 3 semester hours. Writing Intensive Course. Typically offered Periodically.

COMM 353  Advanced Seminar in Writing, Editing, and Page Design for Publications. In this seminar, students work on a major publications project, engage in critical reading of media content, discuss writing, editing and page design strategies, have drafts of their work critiqued in class, and develop a professional portfolio of the work. Periodically. Prerequisite: COMM 150, COMM 207, COMM 208, and COMM 209. 3 semester hours. Writing Intensive Course. Typically offered Periodically. Consent Required.

COMM 381  Multimedia Production for the Web. Students experiment with a variety of web-based materials utilizing applications from text and visual media. Periodically. Prerequisite: COMM 208, WRIT 102. 3 semester hours. Typically offered Periodically. Consent Required.

COMM 382  Nonlinear Editing for Audio and Video. Students learn and apply advanced computer editing skills in audio and video to produce a variety of video projects. Prerequisite: COMM 255. 3 semester hours.

COMM 385  Television and Society. An in-depth investigation of the television industry and its impact on American and world culture. Periodically. Prerequisite: WRIT 102. 3 semester hours. Typically offered Periodically.
COMM 386 Media and Government. Examines major theoretical models of a central problem in mass communications from historical and cross-cultural perspectives. Periodically. Prerequisite: WRIT 102. 3 semester hours. Typically offered Periodically.

COMM 388 Studies in Film Theory and Criticism. Selected topics in film theory and criticism. 3 semester hours. Communications Core Elective. Course Repeatable. Maximum number of units allowed 9.

COMM 390 Images of Men and Women in Advertising. A critical investigation of how we are influenced in the way we think about gender and gender relationships. Periodically. Prerequisite: WRIT 102. 3 semester hours. Typically offered Periodically.

COMM 391 Topics. Study of aspects of communications on the advanced level not covered in the above course offerings. Prerequisite: COMM 207, COMM 208, WRIT 102. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

COMM 392 Senior Project. Advanced applications in a focused area of communications beyond other upper level courses. Senior Project does not count towards the 39 hours required for a degree in communication arts. Prerequisite: Senior standing, completion of or concurrent enrollment in communications courses totaling 39 hours, consent of instructor and department chair and approval of proposal prior to semester in which the student is enrolled. 3 semester hours. Consent Required.

COMM 393 Senior Portfolio. Required of all Communication Arts majors, this course is designed to help the student improve the appearance, content, and organization of their Senior Portfolio. Prerequisite: Senior Standing 3 semester hours.

COMM 395 Independent Study. Designed for the superior student who wishes to explore an aspect of communication beyond the scope of undergraduate course offerings through guided independent study. May be repeated. Prerequisite: COMM 207, approval of department chair, GPA of 3.5 in major. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

Computer Information Systems

CIS 127 Information Technology in Management. This course is designed to provide students with an awareness of the changing nature of technology and the related management issues. It will demonstrate solutions to business problems from a management, technical and organizational perspective. Finally it will provide familiarity with the language of technologists to ease the communication gap between business and technology. The technology covered in the class will include hardware, software, communications, database, emerging technologies, internet and intranets. Prerequisite: Acceptance into Adult Learning Team or Online Program. 3 semester hours.

CIS 180 Introduction to Computing. Techniques and theory of information systems in a rapidly changing technical environment. Technology topics include hardware, software, communications, databases, emerging technologies, internet, intranet. Information systems topics include information processing concepts and functional systems used in business. Each semester. 2 semester hours. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.
CIS 181  Visual Programming Laboratory. Provides programming fundamentals, with applications developed in Visual Basic. Programming topics include variables, formatted output, looping, conditional execution, subroutines, functions. Fall and Spring. Prerequisites Co-registration or credit in CIS/CMSC 180  2 semester hours. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CIS 182  Science Applications Laboratory. A laboratory experience for all students interested in analyzing, processing, graphing, displaying, and presenting scientific data through the use of spreadsheet software (Microsoft Excel). Co-registration or credit in CIS /CMSC 180  1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CIS 183  Office Suite Laboratory. Introduction to the software applications of word processing, spreadsheets, and presentation software using the Microsoft Office Suite for Windows. Fall and Spring. Prerequisites: Co-registration in CIS/CMSC 180  1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CIS 184  Microsoft Excel Laboratory. Introduction to the software application of spreadsheets using Microsoft Excel. Designed for students interested in manipulating, organizing, analyzing, and presenting numerical data and information within the context of business applications. Co-registration or credit in CIS/CMSC 180.  1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Summer Terms.

CIS 200  Computer Programming. An introduction to software design, algorithm development and implementation with the C++ programming language. Elementary programming structures, functions, and text and file processing. Functional and object-oriented design and programming, real world and application modeling, testing and debugging. Spring. Prerequisites: CIS-181 or CMSC-181, MATH-S105 or S110.  4 semester hours. Math Comp Sci Core Elect. Typically offered Spring Term.

CIS 205  Data Structures and Algorithms I. The study of internal data structures, their applications and implementations including one and two dimensional arrays, lists, stacks, queues, linked lists, and tree structures. Introduction to object-oriented programming in C++. Fall. Prerequisite: CIS-C200 or CMSC-C200.  3 semester hours. Typically offered Fall Term.

CIS 220  Introduction to Computer Systems. Basic data representation, logic design, memory organization, CPU organization, bus structures, assembly language, arithmetic calculation, addressing modes, data organization, subprogram mechanisms, integer and floating point representations, instruction representation, pipelining, microprogramming, input and output, and interrupts. Fall. Prerequisite: CIS-C200 or CMSC-C200.  3 semester hours. Writing Intensive Course. Typically offered Fall Term.

CIS 274  Object-Oriented Design and Programming. Investigation of object-oriented design and programming through the use of the Java programming language. Includes classes, inheritance, binding, persistence, and operator overloading. Spring. Prerequisite: CIS 205 or CMSC 205.  3 semester hours. Typically offered Spring Term.

CIS 300  Information and File Storage Systems. Introduction to file systems and file processing. Data storage and access techniques for sequential, random and indexed file organizations. Hashing, index structures, B-trees and their derivatives. Inverted and embedded multilist file organizations. Data Mining. Periodically. Prerequisite: CIS 205.  3 semester hours. Typically offered Periodically.
CIS 330  Database Management Systems. Designing, using, and implementing database systems and applications. Primary emphasis on the relational data model. ER diagrams, realtional algebra, query languages, functional dependency theory, normalization techniques, query processing and optimization, concurrency control, recovery and security. Prerequisite: CIS 274 or CMSC 274. 3 semester hours. Typically offered Spring Term.

CIS 331  Database Management Systems Practicum. A hands-on experience with current issues in database management systems. Topics may include Advanced SQL; database administration; and database connectivity through programming, windows applications, and the internet. Prerequisite: CIS 330 or CMSC 330 or co-registration in CIS 330 or CMSC 330. 1 semester hour. Typically offered Spring Term.

CIS 365  Computer Networks and Data Communication. An introductory course in computer networking and data communications. Theory of a computer network is presented and various types of networks including local area, wide area, and global networks are discussed. Detailed discussion of the Internet Protocol suite (TCP/IP) will be provided. Theory topics include network architecture, data transmission techniques, network topologies, network media, and network security. In addition, the student learns how to use network operating systems. Case studies cover Windows NT, Novell, the Internet, and intranet systems. Prerequisite: CIS 220 or CMSC 220 and junior standing. 3 semester hours. Typically offered Spring Term, Odd Years.

CIS 366  Computer Networks Practicum. A hands-on experience with current issues in computer networks. Development and implementation of stand-alone and web-based client/server applications. Prerequisite: CIS 365 or CMSC 365, or co-registration in CIS 365 or CMSC 365. 1 semester hour. Typically offered Spring Term.

CIS 374  Web Application Development. The architecture and development of Windows applications using the Microsoft Foundation Classes (MFC). The study, design and incorporation of Graphics Interfaces, Print and Print-preview into programs. The study of multithreading, Windows 32 memory management, Active X technology in Object Linking and Embedding (OLE), and the Component Object Model (COM). Concepts of the Internet-Network and an introduction to Internet Programming. Periodically. Prerequisite: CIS 274 or CMSC 274. 3 semester hours. Typically offered Periodically.

CIS 376  Systems Analysis & Design. Tools and techniques associated with the analysis and design of application systems are studied and evaluated. Traditional and state-of-the-art system development life-cycle methodologies are examined. Specific topics include construction and evaluation of user interviews, data flow diagrams, data dictionaries, decision tables and trees and use of prototyping techniques and computer-aided software engineering tools. The course project requires team analysis and design of a new application system. Prerequisite: CIS 205 and one of FINA 300, MGT 300, or MKTG 300. 3 semester hours. Typically offered Fall Term.

CIS 388  Project Management. The art and science of project management as applied to a variety of business and technology settings. Discusses how to initiate, plan, execute and control, and close projects, within budget and on schedule. Includes management of project scope, time, cost, quality, human resources, communications, and risks. A project planning software tool is utilized, usually MS Project. Prerequisite: Junior/Senior Standing. 3 semester hours. Writing Intensive Course. Typically offered Spring Term.

CIS 391  Selected Topics. Various topics to supplement the curriculum. 3 semester hours. Typically offered Periodically.
CIS 396  **ACCA Seminar.** Evening seminar at Associated Colleges of Chicago Area schools dealing with advanced topics in computer science. Topics are announced in advance. May be repeated. Fall. 1 semester hour. Typically offered Fall Term. Consent Required. Course Repeatable. Maximum number of units allowed 4.

CIS 397  **Undergraduate Project.** Independent work on a project supervised by a faculty member in the program. Prerequisite: Consent of Instructor. 1-3 semester hours. Typically offered Periodically. Consent Required.

CIS 398  **Capstone Project.** A team-oriented, software engineering project experience to implement a solution to an information-based problem. Spring. Prerequisite: Senior Standing, CIS 376 or CIS 388. 3 semester hours. Typically offered Spring Term.

CIS 399  **Internship.** Prerequisite: G.P.A. of 2.5 in information system coursework and consent of instructor. 1-6 semester hours. Typically offered Periodically. Consent Required.

**Computer Science**

CMSC 100  **Introduction to PC Software Applications.** Introduction to the software applications of word processing, spreadsheet, and database management using the Microsoft Office Suite for Windows. For non-majors. 3 semester hours.

CMSC 174  **Web-Based Applications Development.** An introduction to creating web applications. Topics include web-page authoring, markup languages, scripting languages, active server pages, multimedia applications, and client/server systems. Not for major credit. Periodically. 3 semester hours. Typically offered Fall Term.

CMSC 180  **Introduction to Computing.** Techniques and theory of information systems in a rapidly changing technical environment. Technology topics include hardware, software, communications, databases, emerging technologies, internet, intranet. Information systems topics include information processing concepts and functional systems used in business. Each semester. 2 semester hours. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CMSC 181  **Visual Programming Laboratory.** Provides programming fundamentals, with applications developed in Visual Basic. Programming topics include variables, formatted output, looping, conditional execution, subroutines, functions. Fall and Spring. Prerequisites: co-registration in CIS/CMSC 180. 2 semester hours. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CMSC 182  **Science Applications Laboratory.** A laboratory experience for all students interested in analyzing, processing, graphing, displaying, and presenting scientific data through the use of spreadsheet software (Microsoft Excel). Co-registration or credit in CIS/CMSC 180. 1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CMSC 183  **Office Suite Laboratory.** Introduction to the software applications of word processing, spreadsheets, and presentation software using the Microsoft Office Suite for Windows. Fall and Spring. Prerequisites: co-registration in CIS/CMSC 180. 1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

CMSC 184  **Microsoft Excel Laboratory.** Introduction to the software application of spreadsheets using Microsoft Excel. Designed for students interested in manipulating, organizing, analyzing, and presenting numerical data and information within the context of business applications. Co-registration or credit in CIS/CMSC 180. 1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.
CMSC 200  **Computer Programming.** An introduction to software design, algorithm development and implementation with the C++ programming language. Elementary programming structures, functions, and text and file processing. Functional design and programming, real world and application modeling, testing and debugging. Spring. Prerequisites: CIS 180 or CMSC 180, MATH 105 or MATH 110. 4 semester hours. Math Comp Sci Core Elect. Typically offered Spring Term.

CMSC 205  **Data Structures and Algorithms I.** The study of internal data structures, their applications and implementations including one and two dimensional arrays, lists, stacks, queues, linked lists, and tree structures. Introduction to object-oriented programming in C++. Prerequisite: CMSC-C200 or CIS-C200. Fall. 3 semester hours. Typically offered Fall Term.

CMSC 220  **Introduction to Computer Systems.** Basic data representation, logic design, memory organization, CPU organization, bus structures, assembly language, arithmetic calculation, addressing modes, data organization, subprogram mechanisms, integer and floating point representations, instruction representation, pipelining, microprogramming, input and output, and interrupts. Fall. Prerequisite: CIS C200 or CMSC C200. 3 semester hours. Writing Intensive Course. Typically offered Fall Term.

CMSC 270  **Data Structures and Algorithms II.** The further study of internal data structures including AVL-trees, B-trees and graphs. Internal sorting algorithms, hashing, and recursion. Algorithm analysis techniques. Prerequisite: CMSC 205 or CIS 205. Spring. 3 semester hours. Typically offered Spring Term.

CMSC 274  **Object-Oriented Design and Programming.** Investigation of object-oriented design and programming through the use of the Java programming language. Includes classes, inheritance, binding, persistence, and operator overloading. Spring. Prerequisite: CIS 205 or CMSC 205. 3 semester hours. Typically offered Spring Term.

CMSC 310  **Operating Systems.** Process and thread management, multiprocessing, kernels and microkernels, mutual exclusion, semaphores, monitors, message passing, deadlock, memory management, paging, segmentation, interprocessor communication and multitasking. Fall, odd years. Prerequisites: CMSC 220 and CMSC 274 or CIS 220 and CIS 274. 3 semester hours. Typically offered Fall Term, Odd Years.

CMSC 311  **Operating Systems Practicum.** A hands-on experience with current issues in operating systems. An internal view of the operating system using the Unix kernel. Inspecting the OS internal state, extending the OS, reimplementing existing data structures and designing new functionality. Linux kernel projects and programming. Fall, odd years. Prerequisite: CMSC 310 or co-registration in CMSC 310. 1 semester hour. Typically offered Fall Term, Odd Years.

CMSC 315  **Formal Language and Automata.** Introduction to automata theory, relationships between regular expressions, finite state automata and grammars, pushdown automata, closure properties on grammars, and the Chomsky hierarchy of grammars. Periodically. Prerequisite: CMSC 274 or CIS 274. 3 semester hours. Typically offered Periodically.

CMSC 330  **Database Management Systems.** Designing, using, and implementing database systems and applications. Primary emphasis on the relational data model. ER diagrams, realtional algebra, query languages, functional dependency theory, normalization techniques, query processing and optimization, concurrency control, recovery and security. Spring. Prerequisite: CIS 274 or CMSC 274. 3 semester hours. Typically offered Spring Term.
CMSC 331 Database Management Systems Practicum. A hands-on experience with current issues in database management systems. Topics may include Advanced SQL; database administration; and database connectivity through programming, windows applications, and the internet. Spring. Prerequisite: CIS 330 or CMSC 330 or co-registration in CIS 330 or CMSC 330. 1 semester hour. Typically offered Spring Term.

CMSC 350 Numerical Analysis. Numerical methods for isolating roots, solving systems of linear equations, interpolation, and evaluating derivatives and definite integrals. Periodically. Prerequisite: "C" or better in MATH 211 and programming experience. 3 semester hours. Typically offered Periodically.

CMSC 351 Numerical Analysis Practicum. A hands-on experience with issues in numerical analysis. Topics may include the application of parallel processing capabilities to numerical problems, extend accuracy computations, computational aspects of large physical problem modeling, or experimental relationships between accuracy and complexity in numerical computations. Periodically. Prerequisite: MATH 380 or co-registration in MATH 380. 1 semester hour. Typically offered Periodically.

CMSC 365 Computer Networks and Data Communication. An introductory course in computer networking and data communications. Theory of a computer network is presented and various types of networks including local area, wide area, and global networks are discussed. Detailed discussion of the Internet Protocol suite (TCP/IP) will be provided. Theory topics include network architecture, data transmission techniques, network topologies, network media, and network security. In addition, the student learns how to use network operating systems. Case studies cover Windows NT, Novell, the Internet, and intranet systems. Spring, odd years. Prerequisite: CIS 220 or CMSC 220 and junior standing. 3 semester hours. Typically offered Spring Term, Odd Years.

CMSC 366 Computer Networks Practicum. A hands-on experience with current issues in computer networks. Development and implementation of stand-alone and web-based client/server applications. Spring, odd years. Prerequisite: CIS 365 or CMSC 365, or co-registration in CIS 365 or CMSC 365. 1 semester hour. Typically offered Spring Term, Odd Years.

CMSC 370 Algorithm Design and Analysis. Methods of designing efficient algorithms including divide and conquer, backtracking, greedy approach, dynamic programming and branch-and-bound. Complexity analysis of algorithms including computational complexity and NP-complete problems. Spring, even years. Prerequisite: CMSC 270. 3 semester hours. Typically offered Spring Term, Even Years.

CMSC 374 Web Application Development. An in-depth study of building Web applications using the client-server model. Topics include an overview of HTML and HTML forms for collecting user data, JavaScript, Web-based Java applications, client-server interaction, CGI programming, preprocessed HTML documents with PHP or Java Server Pages, Web session control with cookies and other useful objects, and database connectivity. Periodically. Prerequisites: CIS/CMSC 274. 3 semester hours. Typically offered Periodically.

CMSC 375 Software Engineering. Software development life cycle, the role of project management, software documentation, and software maintenance and support. Students will do a complete project from the concept phase through the software development cycle. Fall. Prerequisite: CMSC 274 or CIS 274. 3 semester hours. Writing Intensive Course. Typically offered Fall Term.

CMSC 380 Artificial Intelligence. Problem solving methods such as logic programming and heuristic search strategies are applied to topics such as game playing, pattern recognition, natural language processing, theorem proving, and expert systems. Periodically. Prerequisite: CMSC 270. 3 semester hours. Typically offered Periodically.
CMSC 385 Theory of Programming Languages. Organization of programming languages analyzed through representative languages. Introduction to concepts of programming language specification and analysis. Includes type issues, scope, subprograms, runtime behavior and models of programming. Fall, odd years. Prerequisite: CMSC 274 or CIS 274. 3 semester hours. Typically offered Fall Term, Even Years.

CMSC 386 Programming Languages Practicum. A hands-on experience with current issues in programming languages. A more in-depth view of modern languages such as Perl, C#, VB Script and JavaScript and historical languages such as LISP, Prolog, FORTRAN and COBOL. Fall, odd years. Prerequisite: CMSC 385 or co-registration in CMSC 385. 1 semester hour. Typically offered Fall Term, Even Years.

CMSC 388 Computer Graphics. Topics include point-plotting techniques, line-drawing displays, two-dimensional transformations, clipping and windowing, raster graphics, three-dimensional graphics, hidden-surface elimination, and ray tracing. Periodically. Prerequisite: CMSC 270. 3 semester hours. Typically offered Periodically.

CMSC 391 Selected Topics. Various topics to supplement the curriculum. 3 semester hours. Typically offered Periodically.

CMSC 396 ACCA Seminar. Evening seminar at Associated Colleges of Chicago Area schools dealing with advanced topics in computer science. Topics are announced in advance. May be repeated. Fall. Prerequisite: Department Consent 1 semester hour. Typically offered Fall Term. Consent Required. Course Repeatable. Maximum number of units allowed 99.

CMSC 397 Undergraduate Project. Independent work on a project supervised by a faculty member in the program. Prerequisite: Consent of Instructor. 1-3 semester hours. Typically offered Periodically. Consent Required.

CMSC 398 Capstone Project. A team-oriented, software engineering project experience to implement a solution to an information-based problem. Spring. Prerequisite: Senior Standing, CMSC 375. 3 semester hours. Typically offered Spring Term.

CMSC 399 Internship. Prerequisite: G.P.A. of 2.5 in computer science course work and consent of instructor. 1-6 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 6.

Criminal Justice

CJUS 150 Introduction to Statistics. Basic course in statistical techniques which includes measures of central tendency, probability, sampling, estimation and hypothesis testing. For non-business majors. Each semester. IAI M1 902. Prerequisite: "C" or better in MATH 105 or MATH 110. 3 semester hours. Typically offered Fall and Spring Terms.

CJUS 177 Criminal Justice Major Elective 100-Level. This is a course code used only for purposes of transfer credit posting. If transfer credit is posted as equivalent to CJUS 177, the course will be recognized as a 100-level Criminal Justice major elective. 3 semester hours.

CJUS 195 Research Practicum. Participation in on-going departmental research. Consent of department chair required. Offered each term. 1-3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required.
CJUS 206  Juvenile Justice. Treatment of the juvenile offender in the Juvenile Justice System. Emphasis is on theory, research, principles of law as they apply to the juvenile, causation, prevention, the role of the police and the courts and juvenile corrections and treatment of the convicted offender. Pre-requisite: CJUS 260. 3 semester hours. Typically offered Periodically.

CJUS 233  Police Systems. Historical overview of the development of policing systems from early societies to the present. Overview of different police systems throughout the modern world and how they operate. Pre-requisite: CJUS 260. Offered: Periodically. 3 semester hours. Typically offered Periodically.

CJUS 240  Social Problems. Effects of social change, disorganization and value conflict on family life, mental health, ethnic relations, crime and delinquency, related topics. Spring. IAI S7 901. Prerequisite: SOCL 100. 3 semester hours. Typically offered Spring Term.

CJUS 243  Ethics in Policing. Ethical issues faced by law enforcement officers in the course of their personal and professional lives. Basic ethical theory is examined as it applies to selected issues and cases. Pre-requisite: CJUS 260. Periodically. 3 semester hours. Typically offered Periodically.

CJUS 251  Statistics II. ANOVA designs, correlation, regression, non-parametric tests, survey and experimental research techniques, social and behavioral measurements and multivariate analysis. Each semester. Prerequisite: PSYC 150 or SOCL 150 or CJUS 150. Fee: $35 3 semester hours.

CJUS 252  Research Practicum. Goal of the course is to develop the student's research skills in a particular field (Psychology, Sociology or Criminal Justice) by involving him/her in an actual research project under the direction of a faculty member. Students will meet with the instructor on a regular basis and will write both a preliminary proposal and final paper in APA style, the latter to include identification of the subject of the study, a review of the literature, statement of a working hypothesis, construction of necessary operational definitions, delineation of variables, a description of the population (and sample) and statistical tests if appropriate. Pre-requisite: Successful completion of basic skills courses and instructor consent. Offered each term. 3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required.

CJUS 260  Introduction to Criminal Justice. Examination of the criminal justice system: police, courts and corrections. Analysis of functions, jurisdiction, operation and relationships. Annually. IAI CRJ 901. 3 semester hours.

CJUS 277  Criminal Justice Major Elective 200-Level. This is a course code used only for purposes of transfer credit posting. If transfer credit is posted as equivalent to CJUS 277, the course will be recognized as a 200-level Criminal Justice major elective. 3 semester hours.

CJUS 294  Criminal Procedure. In depth analysis of the criminal and juvenile justice process from arrest through adjudication. Offered: Periodically. 3 semester hours. Typically offered Periodically.

CJUS 306  Correctional System. Theory and research relating to treatment, incarceration and rehabilitation of the offender. Annually. IAI CRJ 911. Prerequisite: SOCL/CJUS 260. 3 semester hours. Typically offered Annually.

CJUS 321  Crime and Delinquency. Social and psychological factors related to crime, theories of crime and delinquency, police and court systems and correctional institutions. 3 semester hours. Typically offered Fall Term, Even Years.
CJUS 322  Criminal Law.  An examination of criminal law including origins and developmental changes to the present. Pre-requisite: CJUS 260. Offered: Periodically. 3 semester hours. Typically offered Periodically.

CJUS 324  White Collar Crime.  An analysis of crime as it relates to business and business practices. Examines occupational, political, economic and social variables that relate to white collar criminality. Theory of research will be examined. Emphasis is on causation, prevention, laws, arrest, adjudication, conviction, sentencing and treatment of white collar criminals. Pre-requisite: CJUS 260. Offered: periodically. 3 semester hours. Typically offered Periodically.

CJUS 326  Introduction to Criminal Investigation.  Fundamentals of investigation beginning with the discovery of a crime and including the preservation of the crime scene, the collecting of clues and information, physical and chemical analysis, case preparation and courtroom testing. Case studies will be used. Pre-requisite: CJUS 260. Offered: periodically. 3 semester hours. Typically offered Fall Term, Odd Years.

CJUS 330  Probation and Parole.  Examination of probation and parole as components of the correctional system. Emphasis is on theory, research and the mechanisms of probation and parole as a means of treating adjudicated criminals. Pre-requisite: CJUS 260 and CJUS 306. Offered: Periodically. 3 semester hours. Typically offered Periodically.

CJUS 331  Organized Crime.  Examination of the origins, models and explanations of organized crime and criminal groups, goods and services produced, and the role of the criminal justice system in the social system. Pre-requisite: CJUS 260. Offered: Periodically. 3 semester hours. Typically offered Periodically.

CJUS 351  Research Methods in the Social Sciences.  An analysis of various theoretical approaches to the study of social sciences as well as discussion and completion of the first two chapters of an original research design. Each semester. Prerequisite: PSYC 251 or SOCL 251 or CJUS 251. Fee: $35 3 semester hours. Writing Intensive Course. Typically offered Fall and Spring Terms.

CJUS 356  Clinical Practicum Lab.  Focus is on teaching interpersonal and primary-level skills of empathy, listening, and interviewing to the introductory level helping professional. Pre-requisites: Junior or Senior in CJUS program. 4 semester hours. Typically offered Fall, Spring, and Summer Terms.

CJUS 372  Current Issues in Criminal Justice.  Contemporary critical issues that impact the Criminal Justice System including the legislative process, law enforcement, the judicial process and the correctional system. Pre-requisite: CJUS 260. Periodically. 3 semester hours. Typically offered Periodically.

CJUS 377  Criminal Justice Major Elective 300-Level.  This is a course code used only for purposes of transfer credit posting. If transfer credit is posted as equivalent to CJUS 377, the course will be recognized as a 300-level Criminal Justice major elective. 3 semester hours.

CJUS 390  Criminal Justice Field Placement.  This field placement provides experience in practice in a professional agency under the supervision of a trained practitioner. Pre-requisite: CJUS 356-consent of department chair and field placement director prior to the 10th week of the semester preceding the field placement and a GPA of 2.5 or greater. Offered each term. 3-6 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required. Course Repeatable. Maximum number of units allowed 6.

CJUS 391  Topics in Criminal Justice.  Relevant topics according to the needs and interests of the criminal justice students. Pre-requisite: CJUS 260 3 semester hours. Typically offered Periodically.
CJUS 395  Senior Thesis.  Completion of an original research project under faculty supervision, involving either an original survey design, case study, or experimental analysis. Prerequisite: PSYC 351 or SOCL 351 or CJUS 351.  3 semester hours.  Consent Required.

**Diagnostic Medical Sonography**

DMSC 301  Fundamentals of Sonography.  Orientation to basic ultrasound equipment, instrumentation and transducers, acoustic energy, scanning planes and techniques, anatomy identification, image orientation, and terminology.  3 semester hours.  Consent Required.

DMSC 302  Management and Methods of Patient Care.  Review of patient care techniques for the healthcare professional.  Medical emergencies and patient transfer, infection control and body substance isolation are discussed.  Medical ethics and hospital administration lectures are included.  1 semester hour.  Consent Required.

DMSC 303  Sectional Anatomy for Sonographers.  Study of anatomy of the abdomen, pelvis, and thoracic cavities, the extremities, and the cervical area.  Focus is on cross-sectional 3-dimensional relationships.  2 semester hours.  Consent Required.

DMSC 304  Abdomen Sonography w/Lab.  Study of normal abdominal anatomy and sonographic appearances.  Review of physiologic function and correlation of laboratory data.  Integration of radiology reports, patient history and procedures to effectively perform a diagnostic exam of an organ.  Sonographic methods to visualize pediatric and adult abdomen are discussed.  Lab sessions with practicals in scanning techniques are an integral part of the course.  4 semester hours.  Consent Required.

DMSC 305  Obstetrics-Gynecology Sonography.  Study of obstetrical and gynecological anatomy with clinical applications and sonographic methods used to visualize pelvic organs, pregnant uterus and related structures.  Discussion of embryogenesis and a review of the reproductive cycle is included.  Normal sonographic patterns are studied.  3 semester hours.  Consent Required.

DMSC 306  Clinical Education I.  Application of the principles of ultrasound in a hospital setting under the supervision of a qualified registered sonographer.  Emphasis on liver, pancreas, gallbladder, kidneys, obstetrics, and pelvic areas.  Pass/Fail grading.  2 semester hours.  Consent Required.

DMSC 307  Principles of Ultrasound Physics I.  Introduction and study of the fundamental principles of diagnostic ultrasound physics and instrumentation.  Study of acoustic physics and various diagnostic equipment along with artifacts and quality control.  3 semester hours.  Consent Required.

DMSC 308  Obstetrics-Gynecology Pathology.  Presentation of sonographic appearances of pathology relating to the pelvic organs, pregnant uterus and related structures.  Fetal congenital anomalies and sonographic appearances are examined.  Review of female hormone and reproductive cycle.  Interpretation of patient charts, relating clinical history, lab and radiology reports and surgical procedures to pathologic processes is studied.  Discussion of differentiating characteristics of various pathologies and any related organ involvement.  4 semester hours.  Consent Required.

DMSC 309  Pathophysiology.  Review of organ physiology processes and cellular involvement in various pathologic conditions.  Major organ systems and related pathologies are discussed.  2 semester hours.  Consent Required.
DMSC 310 Abdomen Pathology. Sonographic appearances of pathology relating to abdominal organs and superficial parts are studied. Discussion of differentiating characteristics and pathologic processes of various diseases. Pathology related organ involvement is identified. Interpretation of patient charts, relating clinical history, lab and radiology reports and surgical procedures to pathologic processes. Pediatric pathologies are discussed. 3 semester hours. Consent Required.

DMSC 311 Clinical Education II. This course emphasizes clinical experience progression under the supervision of faculty, sonography staff, and clinical instructor. Continued practicum in the clinical applications of abdominal sonography, female pelvis, and obstetrical application. Effective communication, operation of equipment, patient care and technical skills developed. Pass-fail grading. 3 semester hours. Consent Required.

DMSC 312 Principles of Ultrasound Physics II. Continuation of the study of the fundamental principles of diagnostic ultrasound physics and instrumentation. Study of Doppler physics, spectral and color flow principles and instrumentation, artifacts and QA, plus a review of bioeffects, safety, and AIUM acoustic energy guidelines. 2 semester hours. Consent Required.


DMSC 314 Clinical Education III. The student continues to improve scanning skills under the supervision of faculty, sonography staff and clinical instructor. Emphasis remains on abdominal, small parts, and obstetrical-gynecological sonography. The student will have an opportunity to refine skills and increase self-confidence through progressively more independent scanning. All assigned SCAN proficiencies are completed. Pass-fail grading. 3 semester hours. Consent Required.

DMSC 315 Introduction to Pediatrics and Vascular Imaging. Introduction to neonatal and pediatric sonographic examinations and pathologies. Peripheral vascular anatomy, protocols, and pathologies are discussed. Included is the practice of carotid artery and lower extremity venous peripheral vascular exams under direct supervision in the laboratory setting. 1 semester hour. Consent Required.

DMSC 316 Speciality Sonography. Study of various obstetrical, abdominal, and superficial pars pathology, including neonatal procedures, GI tract, soft tissues, liver transplants, and invasive procedures. Presentation of pathologic processes, sonographic appearances, and clinical history. Administrative duties pertinent to managing a diagnostic ultrasound department are presented. 2 semester hours. Consent Required.

DMSC 317 Clinical Education IV. In this final period of clinical study, the student demonstrates full competency and progresses to full independence under the supervision of sonography staff, clinical instructor, and clinical coordinator. Emphasis on abdominal, small parts, OB_GYN pathology identification, diagnosis, and related organ involvement documentation. Rotations in the practice of peripheral vascular exams, pediatrics, breast imaging, and other specialties within the field may be arranged. Pass/fail grading. 4 semester hours. Consent Required.

DMSC 318 Registry Review. A review of abdomen, OB_GYN, and physics information pertinent to taking the American Registry of Diagnostic Medical Sonography national certification examinations. Registry applications are provided, and mock registry exams are part of the review process. 2 semester hours. Consent Required.
Economics

**ECON 100 Introduction to Economics.** This core course is a general introduction for non-majors into the operation of the economy. Includes the demand-supply model, and study of specific market structures (Microeconomics), and the aggregate demand-aggregate supply model, business cycles, unemployment, inflation and monetary and fiscal policy (Macroeconomics). IAI S3 900. Each semester. Math 095. 3 semester hours. Economics Core Elective.

**ECON 101 Principles of Macroeconomics.** Determination of income, employment, and the price level. Effects of fiscal and monetary policies. IAI S3 901. Math 105, 108, or 110. 3 semester hours. Economics Core Elective.

**ECON 102 Principles of Microeconomics.** Demand-Supply model, consumer and firm decision-making, market structures, price determination, resource allocation. IAI S3 902. Math 105, 108, 110. 3 semester hours. Economics Core Elective.

**ECON 201 Theory of Income and Economic Growth.** Advanced analysis of determinants of growth, national income, employment, and price level; monetary and fiscal policy. Prerequisite: ECON 101, ECON 102. 3 semester hours.

**ECON 202 Price Theory and Application.** Analysis of consumer choices and of decision-making by firms under different market conditions. Prerequisite: ECON 101, ECON 102. 3 semester hours.

**ECON 227 Applied Microeconomics.** This course surveys the broad concepts of microeconomics. Topics include supply-demand concepts, the production function, pricing analysis, resource allocations and market structures. The emphasis is on developing understand and mastery of skills required by managers of organizational units of all types. Prerequisite: ECON 100 or ECON 101 and ECON 102 and Admission to the Adult Learning Team or Online Program. 3 semester hours.

**ECON 291 Topics.** Advance coverage of selected topics in economics. Specific content will vary from year to year depending on which faculty member teaches the course. 3 semester hours.  

**ECON 292 Economics Teaching.** This course is a practicum in economics. Prerequisite: Departmental approval and consent of Instructor. (Each semester.) 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 12.

**ECON 297 Internship.** Practical experience in economics/business-related fields under the supervision of the program. Prerequisite: Permission of the department or of the instructor. (Periodically) 2-6 semester hours. Consent Required.

**ECON 305 Comparative Economic Systems.** A comparative analysis of the major world economic systems, including a critical appraisal of underlying philosophies, economic theories, structures, and performance. 3 semester hours.

**ECON 310 Money and Financial Markets.** Study of money, the banking system, monetary theories, and relation of the monetary system to national income, employment, and price levels. Prerequisite: ECON 101, ECON 102. Fall. 3 semester hours.
ECON 320  Area Studies. Cultural, economic and business conditions of different world regions. Periodically. Prerequisite: ECON 101, consent of instructor. 3 semester hours. Business Core Elective. Typically offered Periodically. Consent Required.

ECON 331  Labor and Industrial Relations. Analysis of the structure and behavior of labor and business enterprises and implications of this behavior for resource allocation and individual welfare. Prerequisite: ECON 101, ECON 202. 3 semester hours. Writing Intensive Course.

ECON 340  Public Finance. This course examines the economics of the public sector, including the impact of the government budget on resource allocation, income distribution and economic stabilization; principles and problems of budget determination, including both tax and expenditure aspects; tax shifting and incidence; and fiscal and debt management policies. Prerequisite: ECON 101, ECON 202 3 semester hours.

ECON 351  Global Development Issues. A study of the meaning, measurement and historical context of economic development and the issues underlying the vast differences in development between nations of the world. Topics covered include population, agriculture, industry, trade and foreign debt. (Periodically) 3 semester hours. Typically offered Periodically.

ECON 360  International Trade and Finance. Trade theory, trade barriers, Balance of payments, Exchange Rates, Open-Economy Macroeconomics. Prerequisite: ECON 101, ECON 310, and "C" or better in MATH 115 3 semester hours.

ECON 370  Industrial Organization & Policy. Focuses on empirical studies in patterns of market structure, business behavior, and performance. Applications in the fields of antitrust and regulation are stressed. Prerequisite: ECON 202. 3 semester hours.

ECON 391  Topics. Advance coverage of selected topics in economics. Specific content will vary from year to year depending on which faculty member teaches the course. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

ECON 395  Independent Study. Directed readings, independent research, or student projects on areas of individual academic interest; topics, meeting times, and outcomes arranged with instructor. Prerequisite: Permission of the department or of the instructor. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

ECON 397  Internship. Practical experiences in business related fields under the supervision of the program. Prerequisite: Permission of the department or of the instructor. 3 semester hours.

Education

EDUC 200  Preclinical Experience. Directed observation and participation in off-campus setting. Students participate in a 35 hour experience. Transportation needed. Each semester. IAI EED 904; IAI SED 905. Prerequisite: Cumulative GPA of 2.50, preclinical application and co-registration in EDUC-205. 1 semester hour. Typically offered Fall, Spring, and Summer Terms.

EDUC 205  History and Philosophy of Education. A survey of education in the United States from the Colonial period to the present with emphasis on the major philosophies which have influenced American education. Philosophies relative to each grade level, including middle grades, are presented. Each semester. Prerequisite: Cumulative G.P.A. of 2.50 and co-registration in EDUC 200. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.
EDUC 206 Transfer Introduction to Education Seminar. A required seminar course for students who have been awarded transfer credit for Education 205 (History and Philosophy of Education). Registration is required during the first semester of matriculation in the School of Education. The seminar will meet for 5 sessions and will serve as introduction to the Benedictine University School of Education, LiveText, and the portfolio process. Students registering for this course will undergo a State of Illinois background check. Each semester. Typically offered Fall, Spring, and Summer Terms.

EDUC 207 Introduction to Education Seminar. For all Education majors and minors who enter Benedictine University as of Fall 2010. Typically offered Fall, Spring, and Summer Terms.

EDUC 210 Educational Psychology. Survey of theories of classroom learning processes including human growth and development, evaluation, the exceptional child and the disadvantaged child. Emphasis also on the developmental characteristics and nature and needs of the early adolescent. Cross-referenced with PSYC 241. Each semester. IAI SED 902. 3 semester hours.

EDUC 215 Technology for Teachers. This required course will cover topics relevant to use of technology in the classroom, lesson planning via technology, and use of the Internet for education purposes. Other topics include: LiveText, Powerpoint, WebCT, Inspiration, Dreamworks, design of web pages and user groups, spreadsheets for grade reports, and digital portfolios. Each semester (module course). Prerequisite: Co-registration in EDUC-200 and EDUC-205 (or EDUC 206); cumulative G.P.A. of 2.5 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

EDUC 227 Aural Skill IV. Fourth course in training of musical skills relating to pitch and rhythmic recognition. Students will develop the ability to sing melodies in pitch and rhythm. Progression through Aural Skill courses dependent on proficiency testing. Spring. Prerequisites: MUSI 101/112, 102/113, and 201/212 or proficiency testing. Co-registration with MUSI 202 required. 1 semester hour.

EDUC 235 Children's Literature. Survey of forms of literature written for children. Emphasis on appreciation and evaluation of books and authors, choices for age groups, school and home settings and the importance of children’s literature as a basis for a lifelong enrichment. Spring. Prerequisite: Cumulative G.P.A. of 2.5. 3 semester hours. Typically offered Spring Term.

EDUC 240 Reading and Language Arts. The development of total content in reading and language arts: emphasizes an holistic approach to teaching reading, writing, speaking and listening. Specific methods and philosophies are discussed relative to grades K-2, 3-5 and 6-8. Fall. Prerequisite: EDUC 205 and cumulative G.P.A. of 2.5. 3 semester hours. Typically offered Fall Term.

EDUC 257 Learning Behavior Characteristics of Individuals with Physical Disabilities and Mental Retardation. Reading and discussion regarding learning and behavioral characteristics of persons labeled with physical handicaps and mental retardation. Students will develop awareness of the diverse medical, physical, motor, communication, social-emotional and cognitive needs and defining characteristics of the population, as well as identify appropriate programming approaches. Fall. Prerequisite: EDUC-260(3), cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 260 Survey of Exceptional Children. Discussion of atypical development: characteristics of persons labeled as having mental retardation, learning disabilities, behavioral disabilities, sensory deficits, speech disorders and health/physical challenges. Diagnosis, referral, educational strategies and legal implications are reviewed. Each semester. Cross referenced with PSYC 204. IAI ECE 913; IAI SED 904. 3 semester hours.
EDUC 265  Learning Behavior Characteristics of Individuals with Learning Disabilities. Includes: severe emotional disturbances history, definitions, assessment techniques, placement procedures and intervention techniques. Current research and theories are explored and analyzed. Focuses on supported education and collaborative learning. Fall. Prerequisite: EDUC-260, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 270  Learning Behavior Characteristics of Individuals with Emotional Disorders. A study of characteristics of people with severe emotional disturbances, including causes, characteristics and implications for therapeutic intervention. Educational approaches and philosophies, as well as diagnostic categories of SED will be explored. Fall. Prerequisite: EDUC-260, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 275  Working with Families of Persons with Disabilities. Designed to enable the future professional to work with families of persons who have exceptional needs. Emphasis is on family systems theory, legislation and formation of cooperative school and home partnerships with families. Spring. Prerequisite: EDUC-260 and cumulative GPA of 2.5. 3 semester hours. Typically offered Spring Term.

EDUC 300  Professional Seminar for Teachers. This required module course is offered each semester and should be taken halfway through the professional sequence of education courses. It is designed to provide a discussion forum for topics such as understanding the school culture, boundary issues, important aspects of school law, relationships with colleagues, demeanor and dress, and classroom responsibilities. Each semester. Prerequisite: Cumulative G.P.A. of 2.5 and TEP. 1 semester hour. Typically offered Fall, Spring, and Summer Terms.

EDUC 310  Measurement & Evaluation. Introduction to basic education statistics, K-12 assessments, understanding assessment issues and understanding educational research. Includes design of classroom tests and education assessments; portfolio assessment; and assessment strategies for exceptional children. Each semester. Prerequisite: EDUC-260 and cumulative G.P.A. of 2.5. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

EDUC 311  Assessment and Diagnosis for Special Education (LBSI). This course provides students with the background and skills essential to utilize diagnostic data to construct appropriate educational recommendations and to prepare comprehensive educational evaluations for students with special learning needs. Pre-Requisite: Educ 260 and cumulative gpa of 2.5 or higher 3 semester hours.

EDUC 312  Methods of Teaching Social Studies - Elementary. Methods and materials for teaching social studies in elementary and middle schools. Specific methods (e.g. reading in the content area) and philosophies are discussed relative to grades K-2, 3-5 and 6-8. Fall. Prerequisite: EDUC-205, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 313  Linguistics for Educators. Linguistics for educators is a classroom focused introduction to the study of language and linguistics. The purpose of this class is to provide classroom teachers with a practical grasp of social and academic linguistic building blocks inherent in the English language and how they apply to teaching ESL. (Includes 15 clinical hours) 3 semester hours. Typically offered Fall, Spring, and Summer Terms.
EDUC 314  **Theoretical Foundations of Teaching English as a Second Language.** This course will help practicing and prospective teachers to understand current research and theories of second language acquisitions (SLA), specifically as they relate to teaching English as a second language. Through readings, critical analysis and thoughtful discussion, students will learn about the current theories of second language learning and acquisition. This class is intended to help prospective teachers create a rationale for their teaching by exposing them to a broad range of theory and research in psycholinguistics, applied linguistics, learning theory, sociolinguistics and the various teaching methodologies which are rooted in these fields. Students will examine the major theories, concepts and guiding hypotheses in the field of Applied Linguistics and Teaching English to Speakers of Other Languages (TESOL) in terms of English language learners’ performance. Students will explore the many factors that affect school performance of second language learners. Students will investigate and develop useful and relevant models of SLA, engage and debate the merits of various theories, and learn the vocabulary of the field (Includes 20 clinical hours)  3 semester hours. Typically offered Fall, Spring, and Summer Terms.

EDUC 315  **Methods of Teaching Mathematics - Elementary.** Characteristics and concepts of programs in elementary and middle-grade mathematics. The patterns of meaningful instruction, curricular trends and teaching materials and philosophies relative to grade K-2, 3-5 and 6-8 are discussed. Students participate in a 35-hour preclinical experience. Transportation needed. Fall. Prerequisite: EDUC-205, co-registration in EDUC-316, cumulative G.P.A. of 2.5, and TEP.  3 semester hours. Typically offered Fall Term.

EDUC 316  **Preclinical Experience - Elementary Mathematics.** Thirty-five hours in an off-campus setting. Transportation needed. Fall. Prerequisite: Preclinical application, co-registration in EDUC-315, cumulative G.P.A. of 2.5, and TEP.  Typically offered Fall Term.  Consent Required.

EDUC 317  **Methods and Materials for ESL.** Briefly overview the historical development and theoretical basis of a range of methodologies and approaches in Teaching English as a Second Language (TESL). Develops an understanding and critical appreciation of the advantages and disadvantages of current approaches, methods, techniques, activities and materials for teaching ESL to students K-12. Examines the relationship between TESL and No Child Left Behind (NCLB) mandated standards. Students will gain practical experience in developing curricula and materials appropriate to specific K-12 ESL teaching contexts. (Includes 20 clinical hours)  3 semester hours. Typically offered Fall, Spring, and Summer Terms.

EDUC 318  **Methods of Teaching Science - Elementary.** Methods and materials for teaching science in the elementary and middle school classrooms. Specific methods (e.g. reading in the content area) and philosophies are discussed relative to grades K-2, 3-5 and 6-8. Spring. Prerequisite: EDUC-205, cumulative G.P.A. of 2.5, and TEP.  3 semester hours. Typically offered Spring Term.

EDUC 320  **Literacy and Assessment.** Includes discussion of reading assessment in terms of diagnosing problems and prescribing instruction for children experiencing reading difficulties in grades K-2, 3-5 and 6-8. Students participate in a 35-hour clinical experience that affords the opportunity to apply theory into practice. Transportation needed. Each semester. Prerequisite: EDUC 240, co-registration in EDUC 321, cumulative G.P.A. of 2.5, and TEP.  3 semester hours. Writing Intensive Course. Typically offered Fall, Spring, and Summer Terms.

EDUC 321  **Preclinical Experience: Reading.** Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-320, cumulative G.P.A. of 2.5, and TEP.  Consent Required.
EDUC 322  Reading, Writing and Thinking in the Middle and Secondary School Curriculum. Examines the relationship between reading, writing, oral communication and thinking and explores strategies for integrating these areas across the curriculum. Examines a variety of theoretical perspectives and instructional strategies involving simulation, role-playing, case studies, inquiry, problem-solving, critical thinking and environmental learning. Lesson and unit plan development emphasized. Spring. Prerequisite: Cumulative G.P.A. of 2.5 and TEP. 3 semester hours. Typically offered Spring Term.

EDUC 330  Methods of Teaching Physical Science - Middle/Jr. and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for middle school and high school. Fall. Prerequisite: EDUC 205, co-registration in EDUC 350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 331  Methods of Teaching Chemical Science - Middle/Jr. and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for middle school and high school. Fall. Prerequisite: EDUC 205, co-registration in EDUC 350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 332  Methods of Teaching Biological Science - Middle/Jr. and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for middle school and high school. Fall. Prerequisite: EDUC-205, co-registration in EDUC-350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 333  Assessment of English as a Second Language and Bilingual Students. Assessment is a systematic process that plays a key role in every aspect of programming for ESL and bilingual learners. Assessment of ESL and bilingual students provides educators with information and hands-on experience in dealing with the subject of formal and informal assessment/evaluation within cross-cultural settings, particularly in the education of ESL and bilingual learners. (Includes 20 clinical hours). 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

EDUC 334  Cultural Diversity and English as a Second Language. This course examines the nature of culture and its impact on the political and social aspects of teaching and learning a second language in culturally and linguistically diverse settings. Related topics include biculturalism, race, ethnicity, gender and social class; the implications of government policies such as No Child Left Behind (NCLB); addressing diversity in the classroom; and interacting with immigrant parents and communities. Students will be involved in critical reflection on both theory and practical experience, with the goal of developing a deeper cultural awareness that can inform their teaching and interaction with diverse communities. (Includes 20 clinical hours) 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

EDUC 335  Methods of Teaching Mathematics - Middle/Jr. and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for middle school (grades 6-8) and high school (grades 9-12). Fall. Prerequisite: EDUC 205, co-registration in EDUC 350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 337  Multicultural Literature for Children and Adolescents. This course will introduce students to a range of high quality multicultural literature for all grade levels. Students will immerse themselves in the texts as they learn how cultural, linguistic and ethnic diversity influence reading; how breadth and depth of reading experience influence vocabulary and comprehension development; a variety of ways to respond to literature; the analysis and evaluation of material; understanding dialect; and language differences and the implication for reading. (Includes 5 clinical hours). 3 semester hours. Typically offered Fall, Spring, and Summer Terms.
EDUC 338  Methods of Teaching English - Middle/Jr. and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for middle school and high school. Fall. Prerequisite: EDUC-205, co-registration in EDUC-350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 340  Methods of Teaching Spanish-Elementary, Middle/Junior, and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for grades K-12. Fall. Prerequisite: EDUC 205, co-registration in EDUC 350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term. Consent Required.

EDUC 342  Methods of Teaching History, Political Science and Economics-Middle/Jr. and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Transportation needed. Fall. Prerequisite: EDUC-205, co-registration in EDUC-350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 343  Methods of Teaching Business/Marketing/Computer Education - Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area for middle school and high school. Fall. Prerequisite: EDUC 205, co-registration in EDUC 350, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall Term.

EDUC 350  Preclinical Experience - Middle/Junior and High School. Thirty-five hours in an off-campus classroom setting in the appropriate grade levels of middle/junior and high school (6-12) and elementary for designated certification areas (K-12). Transportation needed. Prerequisite: Preclinical application, cumulative G.P.A. of 2.5, and TEP. Consent Required. Course Repeatable. Maximum number of units allowed 0.

EDUC 352  Young Adult and Multicultural Literature in the Middle and Secondary School Curriculum. Evaluation, selection and teaching of literature to serve the interests and reading needs of students from the middle-school through high school. The course includes literature which reflects the culture and heritage of America’s multietnic/multicultural population. The course emphasizes theory and research in reading comprehension, literary criticism, including reader response and curriculum and instruction. In addition, the course includes critical analysis, methods of teaching literature and the uses of literature in the curriculum. Periodically. Prerequisite: Cumulative G.P.A. of 2.5 and TEP. 3 semester hours. Typically offered Periodically.

EDUC 353  Methods and Principles of Middle School Education. Analysis of the philosophy and practices in middle-level education. Primary emphasis is placed on the unique needs of middle-level students and programs and instructional methods and practices designed to meet those needs, including content area reading instruction. Examination of teacher roles in the middle school and curricular reform movements, including strategies for teaching across the curriculum. Students participate in a 35-hour preclinical experience. Transportation is needed. Fall and Spring. Prerequisite: EDUC 205, co-registration in EDUC 354, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Fall and Spring Terms.

EDUC 354  Preclinical Experience: Methods and Principles of Middle School Education. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Preclinical application, co-registration in EDUC 353, cumulative G.P.A. of 2.5, and TEP. Consent Required.
EDUC 355  **Classroom Management.** Identifies positive programming strategies for managing challenging behavior in elementary, middle school, secondary and special education classrooms. Prerequisite: EDUC-205, 260, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. **Consent Required.**

EDUC 356  **Preclinical Experience: Classroom Management.** Twenty hours in an off-campus setting. Transportation needed. Prerequisite: Preclinical application, co-registration in EDUC 355, cumulative G.P.A. of 2.5, and TEP. **Consent Required.**

EDUC 357  **Learning Behavior Methods of Teaching Individuals with Physical Disabilities and Mental Retardation.** Techniques for arranging the instructional environment to provide for maximum learner participation; design of individualized adaptations and methods of ensuring learner acquisition, fluency, maintenance and generalization for those learners identified with physical handicaps and mental retardation. 35 hour preclinical experience required. Transportation needed. Spring. Prerequisite: EDUC 257(3), EDUC 205(3), EDUC 260(3), co-registration in EDUC 358(0), cumulative G.P.A. of 2.5, and TEP. Consent Required. 4 semester hours. Typically offered Spring Term.

EDUC 358  **Preclinical Experience: Physical Disabilities and Mental Retardation Methods.** Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Preclinical application, co-registration in EDUC-357(3), cumulative G.P.A. of 2.5, and TEP. **Consent Required.**

EDUC 360  **Learning Behavior Methods of Teaching Individuals with Learning Disabilities.** Focus is on the design, implementation and evaluation of data-based instruction for instructing students with learning disabilities. Students participate in a 35-hour preclinical experience. Transportation needed. Spring. Prerequisite: EDUC-205, 260, 265, co-registration in EDUC-361, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Spring Term.

EDUC 361  **Preclinical Experience: Learning Disabilities Methods.** Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Preclinical application, co-registration in EDUC 360, cumulative G.P.A. of 2.5, and TEP. **Consent Required.**

EDUC 365  **Learning Behavior Methods of Teaching Individuals with Emotional Disorders.** Designed to enable the teacher to implement environmental and contingency management principles. Teacher survival skills in relationship to children labeled as having social/emotional and behavior disorders will be studied. Emphasis will be placed on methods of educating within a functional, age-appropriate, community-based approach. Students participate in a 35-hour preclinical experience. Transportation needed. Spring. Prerequisite: EDUC 205, EDUC 260, EDUC 270, co-registration in EDUC 366, cumulative G.P.A. of 2.5, and TEP. 3 semester hours. Typically offered Spring Term.

EDUC 366  **Preclinical Experience: Emotional Disorder Methods.** Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Preclinical application, co-registration in EDUC 365, cumulative G.P.A. of 2.5, and TEP. **Consent Required.**

EDUC 370  **Student Teaching Elementary and Middle School.** Full semester teaching experience under professional guidance. Includes observation, planning and supervised teaching. Each semester. Prerequisite: Required professional education courses and approval by the Teacher Education Committee. Applications must be submitted one year in advance. Transportation needed. Cumulative G.P.A. of 2.5, admitted into TEP, and ICTS content test. 12 semester hours. Typically offered Fall, Spring, and Summer Terms. **Consent Required.**
EDUC 371  **Student Teaching - Middle/Junior and High School.**  Full semester teaching experience under professional guidance. Includes observation, planning and supervised teaching. Each semester. Prerequisite: Required professional education courses and approval by the Teacher Education Committee. Applications must be submitted one year in advance. Transportation needed. Cumulative G.P.A. of 2.5, admitted into TEP, and ICTS content test. 12 semester hours. Typically offered Fall, Spring, and Summer Terms.  

EDUC 372  **Student Teaching - Elementary Special Education, Learning Behavior Specialist I.**  Half-semester student teaching under professional guidance. Includes observation, planning and supervised teaching in an elementary school. Each semester. Prerequisite: Co-registration in EDUC 373, required professional education courses and approval by the Teacher Education Committee. Applications must be submitted one year in advance. Transportation needed. Cumulative G.P.A. of 2.5, admitted into TEP, and ICTS content test. 6 semester hours. Typically offered Fall, Spring, and Summer Terms.  

EDUC 373  **Student Teaching - Secondary Special Education, Learning Behavior Specialist I.**  Half semester student teaching under professional guidance. Includes observation, planning and supervised teaching in a secondary school. Each semester. Prerequisite: Co-registration in EDUC-372, required professional education courses and approval by the Teacher Education Committee. Applications must be submitted one year in advance. Transportation needed. Cumulative G.P.A. of 2.5, admitted into TEP, and ICTS content test. 6 semester hours. Typically offered Fall, Spring, and Summer Terms.  

EDUC 374  **Student Teaching K-8 Elementary Music Education.**  Half-semester student teaching under professional guidance. Includes observation, planning, and supervised teaching in an elementary school. Transportation needed. Applications must be submitted one year in advance. Cumulative G.P.A. of 2.5, admitted into TEP, and ICTS content test. 6 semester hours.  

EDUC 375  **Student Teaching 6-12 Secondary Music Education.**  Half-semester student teaching under professional guidance. Includes observation, planning, and supervised teaching in a secondary school. Transportation needed. Applications must be submitted one year in advance. Cumulative G.P.A. of 2.5, admitted into TEP, and ICTS content test. 6 semester hours.  

EDUC 391  **Topics.**  Relevant topics according to the needs and interest of education students. Prerequisite: Cumulative G.P.A. of 2.5 and TEP. 1-3 semester hours.  

EDUC 395  **Independent Study in Education.**  Intensive independent study on a problem topic in education to fit the specific interests as well as needs of specific research problems. Work cannot be done in conjunction with another education course, nor in place of a required course. Prerequisite: Permission of the education advisor, cumulative G.P.A. of 2.5., and TEP. 1-3 semester hours.  

**Engineering**  

ENGR 120  **Engineering Graphics.**  Fundamentals of engineering communications employing applied geometry in instrument and CAD presentation and interpretation of orthographic, sectional, intersection, development and pictorial views. Introduction to basic machine elements and shop practices. Fall. 2 semester hours. Typically offered Fall Term.
ENGR 220  Analytical Mechanics. This course presents an intermediate treatment of Newton's law in various coordinate systems, projectile motion including air resistance, momentum, angular momentum, energy and conservative forces, driven and damped oscillators, LaGrange's equations, two-body central force problems, mechanics in non-inertial frames, rotational motion of rigid bodies, and coupled oscillators. The course introduces vector calculus, differential equations, complex numbers, Taylor series, and matrices in the solutions to problems. Fall. IAI EGR 942. Prerequisites - PHYS 211 and credit or co-registration in MATH 211. 3 semester hours. Typically offered Fall Term.

ENGR 264  Electronics. An integrated laboratory and lecture course designed to cover the basic principles of modern electronics. Topics include AC and DC circuits, linear and non-linear devices, power supplies, operational amplifiers, and logic circuits. Lecture and laboratory work are integrated allowing the students to test the theory through projects that the students design and build. Spring. Pre-Requisite: Phys 118 or 212 or consent of the Instructor. Cross listed with PHYS 264. 3 semester hours.

English as a Second Language

ESLS 10  Beginning Listening. Recognizes the names of familiar objects by listening to language in clearly contextualized situations. Constructs meaning by combining comprehension of familiar vocabulary words with a variety of strategies to fill in gaps. Each semester. 2 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 18.

ESLS 11  Beginning Reading. Begins with the basic vocabulary and sentence patterns; reading oral presentations. Identifies an increasing number of cognates, borrowed words, and highly contextualized words and phrases. Each semester. 2 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 18.

ESLS 13  Beginning Oral Communication. Focuses on successfully communicating basic survival needs for campus and community. Develops conversational abilities by focusing on questions and answers as the foundation of oral interaction. Pre-requisite: Co-registration with ESLS 014. Each semester. 2 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 18.

ESLS 14  Pronunciation I Workshop. Workshop oriented course to develop speech clarity with emphasis on phonetic alphabet identifying, distinguishing, producing, and contrasting correct sounds, stress, intonation, and rhythm. Learns various accent reduction techniques. Each semester. 2 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 18.

ESLS 15  Beginning Writing. Emphasizes sentence level grammar; practice supplying written responses to questions. Begins to organize ideas into simple paragraph form. Prerequisite: Co-registration in ESLS 016. Each semester. 3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 27.

ESLS 16  Grammar I Workshop. Workshop oriented course that emphasizes the formal properties of the English language. Focuses on basic statement and question patterns, identifying parts of speech, subject/verb agreement, simple and continuous present, past, and future tenses, and introduce nouns/pronouns, articles, adverbs, and adjectives, demonstratives, possessives, conjunctions, quantifiers, prepositions, and modals. Practices error correction and TOEFL tests. Each semester. 1 semester hour. Consent Required. Course Repeatable. Maximum number of units allowed 9.
ESLS 17 Individualized Instruction. A personalized program of study designed to satisfy individual, academic or professional goals. Emphasis may be placed on one or more language modalities. Open to the beginning, intermediate, and advanced-level student. Each semester. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 27.

ESLS 20 Intermediate Listening. Improves speaking and listening abilities in performing social and academic functions. Practices note-taking from oral talks, and video/audio clips; identifies main points and support. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 21 Intermediate Reading. Reads a variety of simple connected texts with increased understanding. Attention to skimming and scanning as well as paraphrasing and summarizing short texts. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 24 Pronunciation II Workshop. Workshop oriented course to develop speech clarity with emphasis on phonetic alphabet identifying, distinguishing, producing, and contrasting correct sounds, stress, intonation, and rhythm. Learns various accent reduction techniques. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 25 Intermediate Writing. Learns to write paragraphs with a topic sentence, supporting details, and concluding statement. Writes on a variety of topics. Prerequisite: Co-registration with ESLS 026. Each semester. 3 semester hours. Course Repeatable. Maximum number of units allowed 27.

ESLS 26 Grammar II Lab. Workshop oriented course that emphasizes the formal properties of the English language. Identifies and develops a greater control of the students' grammar needs. Areas of focus include: present, past, future, and perfect tenses; noun phrases; adjectives clauses and adjective phrases; comparisons; modals; gerunds and infinitives. Practices error correction and TOEFL tests. Each semester. 1 semester hour. Course Repeatable. Maximum number of units allowed 9.

ESLS 27 Individualized Instruction. A personalized program of study designed to satisfy individual, academic or professional goals. Emphasis may be placed on one or more language modalities. Open to the beginning, intermediate, and advanced-level student. Each semester. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 27.

ESLS 30 Advanced Listening. Uses authentic listening sources to develop the ability to listen to general, academic information and improve note-taking skills. Students will attend a lecture in their field of study. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 31 Advanced Reading. Reads authentic academic and literary texts. Focus on critical reading skills such as recognizing bias and assessing the validity of written material. Improves skimming and scanning techniques. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 33 Advanced Oral Communication. Participates fully in discussions and present ideas on complex topics. Prepares formal presentations making full use of support technology. Prerequisite: Co-registration with ESLS 034. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 34 Pronunciation III Workshop. Workshop oriented course to develop speech clarity with emphasis on phonetic alphabet identifying, distinguishing, producing, and contrasting correct sounds, stress, intonation, and rhythm. Learns various accent reduction techniques. Each semester. 2 semester hours. Course Repeatable. Maximum number of units allowed 18.

ESLS 35 Advanced Writing. Focuses on writing as a process. Writes cohesive works in various patterns of essay organization. Prerequisite: Co-registration with ESLS 036. Each semester. 3 semester hours. Course Repeatable. Maximum number of units allowed 6.

ESLS 36 Grammar III Lab. Workshop oriented courses that emphasizes the formal properties of the English language. Identifies and improves on students' grammar needs. Areas of focus include: present, past, future, and perfect tenses; noun phrases and clauses; adjective clauses and adjective phrases; gerunds and infinitives; modals; passives; conditionals; adverb clauses and phrases; connecting ideas. Practices error correction and TOEFL tests. Each semester. 1 semester hour. Course Repeatable. Maximum number of units allowed 9.

ESLS 37 Individualized Instruction. A personalized program of study designed to satisfy individual, academic or professional goals. Emphasis may be placed on one or more language modalities. Open to the beginning, intermediate, and advanced-level student. Each semester. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 27.

ESLS 100 College Conference Writing. This bridge course introduces and develops college-level writing as a writing process. Improves on developing and supporting a thesis in a variety of organized essays including a research paper. Emphasizes self and peer editing, and strategies for essay exams. Each semester. 3 semester hours. Course Repeatable. Maximum number of units allowed 27.

Environmental Science

ENVS 105 Physical Geography. An introduction to hydrology and the physical processes operating in and on the planet earth. Topics of study will include ground and surface water, the hydrologic cycle, watershed models, groundwater recharge, geomorphology, tectonics, structural features, and geological processes relating to natural resource management, environmental processes and concerns. Periodically. 3 semester hours. Physical Science Core Elective. Typically offered Periodically.

ENVS 205 Environmental Science. A survey of environmental science with an emphasis on global concerns, biological and physical resources, resource use, conservation issues, and the interactions among science, society, and the environment. Fall. Prerequisite: BIOL 197 or 198. Cross listed BIOL 205/ENVS 205. 3 semester hours. Typically offered Fall Term.

ENVS 210 OSHA Hazardous Waste Operation & Emergency Response Training. Forty classroom hours of training in recognition, evaluation, and proper work practices dealing with hazardous materials and wastes in compliance with 29CFR 1910.120. Students passing the course will receive a certificate renewable every year allowing them to work on sites in compliance with the federal statute. There will be an extra certification fee associated with the course. Spring. 1 semester hour. Consent Required.
ENVS 211 OSHA Hazardous Waste Operations and Emergency Response Training Refresher. Eight classroom hours of training in the recognition, evaluation, and proper work practices dealing with hazardous materials and hazardous waste evaluation. The class is for the annual recertification in compliance with 29CFR 1910.120 for students who have passed ENVS-210 or who have current valid certification through other institutions. There will be an extra certification fee associated with the course. Prerequisite: ENVS 210. Spring. 1 semester hour. Consent Required.

ENVS 300 Limnology. The study of the interrelations among the physical, chemical, and biological components of freshwater ecosystems. Includes taxonomy, adaptations, distributions, and abundance of aquatic organisms. Periodically. Prerequisite: BIOL 229, CHEM 124 or CHEM 236. Cross-listed ENVS / BIOL 300. 3 semester hours.

ENVS 305 Environmental Toxicology. A study of the toxic effects of chemicals on human and ecological populations. Includes the physiological, genetic, and teratogenic effects of chemicals on humans and the study of biomagnification of chemicals through the food chain. Case studies and risk modeling using computers will be included to integrate theory and regulatory compliance. Periodically. Prerequisite: BIOL 256 or BIOL 258. Cross listed with ENVS / BIOL 305. 3 semester hours.

ENVS 398 Capstone Project. Projects (involving laboratory and field study) that integrate the principle and practice of environmental issues. The experience culminates in written and oral presentation of the findings. May be repeated. Periodically. 1-3 semester hours. Typically offered Periodically. Consent Required.

Finance

FINA 120 Financial Literacy. This course provides students of all majors, concentrations and levels of study, strategies to achieve good spending and savings habits, along with an opportunity to share their knowledge with others in the outside community. Students will create a personal budget and statement of net worth, keep track of their spending and learn how to better manage credit card debt and learn how to use benefit and savings plans to help achieve future financial goals. This course has a service learning component. Fall and Spring-yearly. 2 semester hours. Typically offered Fall and Spring Terms.

FINA 220 Personal Financial Planning. An introduction to personal financial planning. Topics covered include: time value of money, tax planning, cash management, credit cards, purchase of home, auto and health insurance, retirement and estate planning. Spring semester. 3 semester hours. Business Core Elective. Typically offered Spring Term.

FINA 297 Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 12.

FINA 300 Managerial Finance. An analysis of the functions of financial management in the decision-making process of the firm. Fall and Spring semesters. Prerequisite: ACCT 112, Math 115 3 semester hours. Typically offered Fall and Spring Terms.

FINA 310 Money and Financial Markets. Study of money, the banking system, monetary theories, and relation of the monetary system to national income, employment, and price levels. Prerequisite: ECON 101, ECON 102. Fall. 3 semester hours.
FINA 320 Investments. A framework useful to develop investment policy for individuals and institutions; security evaluation methods and portfolio management strategies are developed. Fall semester. Prerequisite: FINA 300 3 semester hours. Typically offered Fall Term.

FINA 330 Business & Economic Forecasting. Aquaints students with statistical forecasting methodologies, while placing special emphasis on the underlying assumptions. The emphasis is on time-series methods used for forecasting and includes techniques such as decomposition, smoothing, regression, and ARIMA modeling. (See MBA-613 in the graduate bulletin). 3 semester hours.

FINA 340 Public Finance. This course examines the economics of the public sector, including the impact of the government budget on resource allocation, income distribution and economic stabilization; principles and problems of budget determination, including both tax and expenditure aspects; tax shifting and incidence; and fiscal and debt management policies. Prerequisite: ECON 101, ECON 202 3 semester hours.

FINA 360 International Trade and Finance. Trade theory, trade barriers, Balance of payments, Exchange Rates, Open-Economy Macroeconomics. Prerequisite: ECON 101, ECON 310, and "C" or better in MATH 115 3 semester hours.

FINA 370 Multinational Corporate Finance. Stresses the financial decision-making of a firm in an international setting. Covers international financial markets, exchange risk management, asset and liability management, and international banking. Pre-requisite: Econ 101, Econ 102, ACCT 111. Spring. 3 semester hours. Typically offered Spring Term.

FINA 380 Advanced Managerial Finance. A continuation of Managerial Finance with a focus placed upon corporate financial decisions. The case approach is used to analyze various advanced finance-related topics. Spring semester. This is the capstone course for the Finance major. Prerequisite: FINA 300 3 semester hours. Typically offered Spring Term.

FINA 391 Topics. Specially designed courses in various business topics to supplement the business curriculum. Prerequisite: Varies based upon the specific topic being explored. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

FINA 395 Independent Study. Provides an opportunity for an advanced student in the major to pursue study in a field of business related interest. Prerequisite: Consent of instructor. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

FINA 397 Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Consent Required.

Fine Arts

FNAR 100 Art Appreciation. Introduction to the visual arts through lectures, discussions and field trips. Each semester. IAI F2 900. 3 semester hours. Fine Arts Core Elective. Typically offered Fall and Spring Terms.

FNAR 101 Fundamentals of Design. Emphasizes the knowledge and application of basic design principles of two-dimensional images in representational and abstract forms. Fall. 3 semester hours. Fine Arts Core Elective. Typically offered Fall Term.
FNAR 111  Drawing.  Fundamental drawing from observation with emphasis on linear perspective and tonal modeling of the still life and human head. Each semester. IAI ART 904. Fee $30.00  3 semester hours. Fine Arts Core Elective.

FNAR 120  Lettering & Layout - Foundational.  Introduction to calligraphic lettering with a broad-nib pen. Explores a variety of designs and techniques in italic and related cursive styles. Fall.  3 semester hours. Fine Arts Core Elective. Typically offered Fall Term.

FNAR 121  Lettering & Layout - Italic.  Introduction to calligraphic lettering with a broad-nib pen. Explores a variety of designs and techniques in italic and related cursive styles. Spring.  3 semester hours. Fine Arts Core Elective. Typically offered Spring Term.

FNAR 203  Ancient and Medieval Art.  Photographic presentations of significant paintings, sculptures and buildings with emphasis on religious concepts. Fall. IAI F2 901; ART 901.  3 semester hours. Fine Arts Core Elective. Typically offered Fall Term.

FNAR 204  Renaissance to Modern Art.  Pictorial survey of painting, sculpture and architecture in Western civilization with emphasis on religious concepts. Spring. IAI F2 902; ART 902.  3 semester hours. Fine Arts Core Elective. Typically offered Spring Term.

FNAR 205  History of Graphic Art and Design.  An survey of graphic design history covering the development of symbols, typography, advertising, books, posters, the Bauhaus and the 20th Century avante garde influence on design.  3 semester hours.

FNAR 210  Figure Drawing.  Introduction to drawing the human figure from observation. Fall, odd years. IAI ART 906. 3 semester hours. Typically offered Fall Term, Odd Years.

FNAR 225  Art for Elementary Teachers.  A methods and media lecture/studio course for elementary education students in the teaching of art to children from grades K-6. The course will identify art content, art media, and instructional pedagogy for including art at the elementary level. Prerequisite: Enrollment in the Elementary Education program or permission of the instructor.  3 semester hours. Typically offered Fall Term.

FNAR 240  Printmaking: Intaglio(Etching).  A studio course emphasizing the etching medium. Spring, even years.  3 semester hours. Fine Arts Core Elective. Typically offered Spring Term, Even Years.

FNAR 241  Printmaking: Relief.  Introduction to the woodcut and relief processes. Fall, even years.  3 semester hours. Typically offered Fall Term, Even Years.

FNAR 242  Printmaking: Silk-Screen.  A studio course on silk-screen printing. Fall, odd years.  3 semester hours. Fine Arts Core Elective. Typically offered Fall Term, Odd Years.

FNAR 243  Printmaking: Lithography.  A studio course utilizing the traditional technique of printing on Limestones. Fall, odd years.  3 semester hours. Fine Arts Core Elective. Typically offered Fall Term, Odd Years.

FNAR 250  Oil Painting.  An introductory studio course emphasizing color mixing as it relates to traditional representation. Spring. IAI ART 911.  3 semester hours. Fine Arts Core Elective. Typically offered Spring Term.
FNAR 260 Graphic Design I. This course will introduce the student to vector drawing programs used for creative art purposes. 3 semester hours.

FNAR 261 Graphic Design II. A continuation of Graphic Design I. The student will use painting and photo editing programs and employ analytical skills for purposes of creation and critical appraisal. 3 semester hours.

FNAR 291 Topics. Focuses on various topics relating to the needs of the students and recent events and/or topics of interest. Periodically. 3 semester hours. Fine Arts Core Elective. Typically offered Periodically.

FNAR 292 Black and White Photography. Foundations of photographic theory, shooting, and print developing. 3 semester hours. Fine Arts Core Elective. Typically offered Fall Term.

FNAR 293 Digital Photography. Emphasis on shooting and manipulation of digital camera imagery. 3 semester hours. Fine Arts Core Elective.

FNAR 294 Computer Art. Creation of artwork using the computer as medium. 3 semester hours. Fine Arts Core Elective. Typically offered Periodically.


FNAR 296 Science Meets Art. The relationship between science and art will be studied in 8 two-week units to help science majors develop illustration skills and an appreciation for qualitative empirical evidence. Pre-requisites: completion of one life science course and one physical science course. Spring semester. Fine Arts/Music Core Elective. 3 semester hours. Typically offered Spring Term.

FNAR 305 Advanced Painting. Representation of the human figure in oil painting while concentrating on compositional devices used throughout the history of art. Prerequisite: FNAR 250. 3 semester hours. Fine Arts Core Elective.

FNAR 311 Advanced Drawing. An intensive investigation into the use of value and the compositional elements of picture making. Emphasis will be placed on the methods of representation as evidenced by the traditions of past masters. Fall. Even years. Prerequisite: FNAR-C111. 3 semester hours. Fine Arts Core Elective. Typically offered Fall Term, Even Years.

FNAR 340 Advanced Studio Course: Intaglio. Advanced study in the medium of etching. Pre-requisite: FNAR C240. 3 semester hours.

FNAR 360 Senior Seminar: Professional Portfolio. The students will analyze the job markets and prepare analyses of current issues in the performing arts. Analyses of demographics affecting the operations and organization of art programs in the United States will be studied. Students will be required to create a portfolio of personal data to prepare for job searches, prepare for mock interviews and present exhibition of works. Spring. Prerequisite: Junior Standing 3 semester hours. Music Core & Writing Intensive. Typically offered Spring Term.

FNAR 381 Advanced Studio I. An advanced studio course that focuses on advanced issues in art making related to medium and content. The instructor may also introduce a theme for the course to further influence student work. Pre-requisite: Any 100 or 200 level studio course. 3 semester hours. Typically offered Fall and Spring Terms.
FNAR 382  Advanced Studio II. An advanced studio course that focuses on advanced issues in art making related to medium and content. Students develop individual mastery in form and chosen subject matter. Pre-requisite: Advanced Studio I (FNAR 381). 3 semester hours. Typically offered Fall and Spring Terms.

FNAR 383  Advanced Studio III. An advanced studio course that focuses on advanced issues in art making related to medium and content. Students continue to develop individual mastery in form and chosen subject matter. Pre-requisite: Advanced Studio II (FNAR 382) 3 semester hours. Typically offered Fall and Spring Terms.

FNAR 384  Advanced Studio IV: Senior Exhibit. An advanced studio course that focuses on advanced issues in art making related to medium and content. Students focus their efforts on compiling art for their senior exhibit. Pre-requisite: Advanced Studio III (FNAR 383). 3 semester hours. Typically offered Fall and Spring Terms.

FNAR 391  Topics. Focuses on various topics relating to the needs of the students and recent events and/or topics of interest. Periodically. 1-3 semester hours. Typically offered Periodically. *Course Repeatable. Maximum number of units allowed 99.

FNAR 395  Independent Study. A course designed to provide students with individual and focused coursework in some area of studio art. Prerequisite: Department Consent 1-3 semester hours. *Consent Required. Course Repeatable. Maximum number of units allowed 99.

FNAR 397  Internship. A practical course intended to give those students who are qualified an opportunity to do some observing - either in a classroom or privately - or to perform any practical job associated with his or her field under the supervision of the faculty. Each semester. Prerequisite: Department Consent 3 semester hours. Typically offered Fall and Spring Terms. *Consent Required.

FNAR 398  Senior Seminar. Theory and Criticism. (Admission restricted to art majors) The second of two required senior seminars of all studio arts majors. Discussion of key texts pertaining to the study of aesthetics, the theory and practice of studio art, art criticism and the role of the artist in society. Begin work towards professional exhibition of works. Fall. 3 semester hours. Typically offered Fall Term. *Course Repeatable. Maximum number of units allowed 99.

French

FREN 291  Topics in French Language and Literature. Intermediate-level study of topics in French literature, culture and civilization. 1-3 semester hours. *Course Repeatable. Maximum number of units allowed 99.

FREN 391  Topics in French Language and Literature. Advanced-level study of topics in French literature, culture and civilization. 1-3 semester hours.

FRN 310  Style/Structure in French Comp.. Course at North Central College through Consortium 3 semester hours. *Consent Required.

Gender Studies
**GENS 100 Gender and Literature.** Introduction to gender issues in a variety of disciplines and exploration of international issues in the human social development that stem from the ways that gender is constructed, institutionalized, and exacted in the contemporary world. Emphasis will be placed on understanding the biological, social and cultural bases of gender differentiation as they are understood and acted upon in our own and in other societies. Cross listed with LITR C281. 3 semester hours. Literature Core Elective.

**Geography**

**GEOG 105 Earth and Space Science.** A physical science laboratory course that includes the study of key principles of Earth and Space Science through the investigation of real world problems. The earth science component includes the study of large-scale dynamic forces, events, and processes that affect the Earth’s land, water, and atmospheric systems, identification and evaluation of the uses of the Earth’s resources, and the processes involved in the life cycle. The space science component focuses on concepts that explain the composition, structure of and changes in the universe and Earth’s place in it. By working and studying within the context of a real world problem, students learn how scientific principles are used and applied in everyday life. IAI P1 909. Spring. 4 semester hours. Typically offered Spring Term.

**GEOG 106 Geography and Cartography.** An interdisciplinary offering that covers basic physical geography before moving to the study of cartography and then to cultural geography. Students will demonstrate an understanding of human population growth and its impact on the earth's resources, including food, energy, physical materials, water, and landscapes; the geography of resource availability and the limits of the earth as producer of resources. They will also be required to use computer software to explore connections between geography and contemporary political, social, and economic issues. 3 semester hours.

**GEOG 107 Earth and Space Science.** A physical science laboratory course that includes the study of key principles of Earth and Space Science through the investigation of real world problems. The earth science component includes the study of large-scale dynamic forces, events, and processes that affect the Earth’s land, water, and atmospheric systems, identification and evaluation of the uses of the Earth’s resources, and the processes involved in the life cycle. The space science component focuses on concepts that explain the composition, structure of and changes in the universe and Earth’s place in it. By working and studying within the context of a real world problem, students learn how scientific principles are used and applied in everyday life. IAI P1 909. Spring. 4 semester hours. Typically offered Spring Term.

**Ger**

**GER 201 Intermediate German I.** Class at North Central College 3 semester hours. Consent Required.

**Global Studies**

**GBLS 101 Introduction to Global Studies.** This interdisciplinary course will survey and interrogate the major events and processes such as colonialism, imperialism and globalization that shape and inform the contemporary world. From the perspectives of selected regions, Latin America, non-Latin America, the Middle East and the Mediterranean, the course will explore the 21st century challenges they face and the solutions they offer for preserving and inhabiting the new, global, interdependent – world. 3 semester hours. Global Studies Core Elective.

**GBLS 102 Global Studies II.** This course introduces students to research methods in various academic disciplines that are essential for conducting research in Global Studies topics. Students research topics related to global environmental issues. 3 semester hours. Global Studies Core Elective.
GBLS 200  American Studies. This course uses elements of fiction and non-fiction in the study of various topics of race, class and gender in American Studies.  Fall.  Cross listed with HIST 200.  3 semester hours. Typically offered Fall Term.

GBLS 202  Theories in Global Studies. Course examines the major theoretical concepts in the field of Global Studies such as capitalism, communism, socialism, transnationalism and globalization.  Offered Fall.  Cross listed with GBLS 302 3 semester hours. Global Studies Core Elective. Typically offered Fall Term.

GBLS 220  Mediterranean World. Studies the ancient cultures located around the Mediterranean Sea and the contributions they made to the development of western civilizations to about 500 A.D. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" as reflected in religion, art, philosophy, and social, political, and economic institutions.  Spring.  3 semester hours. Typically offered Spring Term.

GBLS 300  Junior Seminar: Topics in Global Studies. Junior year seminar which takes as its focus one topic of global significance (e.g. global poverty, AIDS, development). Topic varies by year and instructor.  Fall.  3 semester hours. Typically offered Fall Term.

GBLS 301  Advanced U. S. Literary and Cultural Studies. Explores critical questions, analytical categories, and common methodologies that structure the practice of U. S. literary and cultural studies. Students will work with primary literary texts as well as secondary sources and theoretical works. Students will also complete a research paper. Pre-requisite: LITR 100 and GBLS 200.  Offered spring.  3 semester hours. Global Studies Core Elective. Typically offered Fall Term, Even Years.

GBLS 302  Theories in Global Studies. Course examines the major theoretical concepts in the field of Global Studies such as capitalism, communism, socialism, transnationalism and globalization.  Offered Fall.  Cross listed with GBLS 302 3 semester hours. Global Studies Core Elective. Typically offered Fall Term.

GBLS 391  Global Studies Topics.  3 semester hours. Typically offered Fall Term.

GBLS 395  Independent Study. Independent study of a global studies theme in consultation with department professors. Department consent required.  3 semester hours.  \textit{Consent Required.}

GBLS 399  Senior Thesis. Senior capstone experience. Pre-requisite: GBLS 101 and GBLS 102 or senior standing. Spring.  3 semester hours. Typically offered Spring Term.

\textbf{Graphic Arts and Design}

GAD 230  Typography. This course introduces typography as a vital element of visual communications. Typographic structure, terminology, expression, and strategy will be explored from the single letterform to an entire page layout. This studio course uses both computer and hands on skills to address the effective use of typography.  Offered Spring.  3 semester hours. Typically offered Spring Term.

GAD 260  Graphic Design I. New course fall 2011  3 semester hours.
GAD 261  Graphic Design II.  A continuation of Graphic Design I.  The student will use painting and photo-editing programs and employ analytical skills for purposes of creation and critical appraisal.  Pre-requisite: GAD 260.  $50.00 fee.  Offered: Spring, yearly.  3 semester hours.  Typically offered Spring Term.

 Health Administration

HADM 250  Disaster Management: For the First Responder.  Disaster Management for the First Responder - This undergraduate online certificate courses is a derivative of the MPH 650 course which covers the basic tenets of emergency management.  3 semester hours.

HADM 300  Health Systems.  Overview of the history, basic structures and operations of public health and health care delivery systems.  3 semester hours.

HADM 301  Behavioral and Social Aspects of Public Health.  Overview of social and psychological determinants and theories of health behavior.  3 semester hours.

HADM 303  Ethical and Political Issues.  This course focuses on the ethical and political dimensions of public health and health care organizations and professions.  Prerequisite: HADM 300  3 semester hours.

HADM 305  Disaster Management: Environmental Health.  Environmental Health- This undergraduate online certificate course is a derivative of MPH 605 that covers various ways to investigate environmental issues.  3 semester hours.

HADM 354  Disaster Management: Social and Psychological Aspects of Disaster Management.  Social and Psychological Aspects of Disaster Management-This undergraduate online certificate course is a derivative of MPH 654 that covers the social and psychological aspects of emergency management and means of communications when dealing with the general public.  Yearly.  3 semester hours.  Typically offered Annually.

HADM 355  Health Care Safety Aspects of Disaster Management.  3 semester hours.

HADM 356  Disaster Management: Operational Aspects of Disaster Management.  Operational aspects of Disaster Management-This undergraduate online certificate is a derivative of the MPH 656 course which covers preparedness and mitigation planning.  Yearly.  3 semester hours.  Typically offered Annually.

HADM 357  Disaster Management: Public Health Aspects of Disaster Management.  Public Health Aspects of Disaster Management- This undergraduate online certificate course is a derivative of MPH 657 that covers the public health aspects emergency management as it relates to basic human services as well as epidemic responses.  Yearly.  3 semester hours.  Typically offered Annually.

HADM 358  Financial Planning in Health Care Organizations.  Applies the principles and techniques of financial management to intermediate and long-range planning in health care organizations.  Topics include capital budgeting, cash flow analysis, planning short and long-range financing and prospective payment systems.  Prerequisite: HADM 300  1.5 semester hours.

HADM 363  Legal Aspects of Health Care Administration.  Covers the issues of patient rights and consent, reimbursement, expansion, malpractice, risk management and coordination with regulatory agencies.  1.5 semester hours.

HADM 371  Finance in Public Health Care Delivery.  This course considers the development of managed care, types of organizations and plans, financial models, risk management and trends, plus the complex interplay of provider, employer, payer and patient and probes the impact of managed care on health care providers, including the effects on utilization management, outcomes monitoring, quality assessment, shifting risk to providers and delivery trends.  Prerequisite: HADM 300  3 semester hours.

HADM 372  Managed Care Impact on Care Delivery.  This course probes the impact of managed care on health care providers, including the effects on utilization management, outcomes monitoring, quality assessment, shifting risk to providers and delivery trends.  Prerequisite: HADM 371  1.5 semester hours.

HADM 386  Government Regulations in the Health Industry.  Regulations and systems designed to protect personal health information (e.g. HIPPA), licensing of health facilities; and quality of health care.  Offered spring and summer.  Cross listed with MPH 686.  3 semester hours.  Typically offered Spring and Summer Terms.  Consent Required.

HADM 392  Health Policy and Law and Legal Aspects of Health Care.  Examination of the legal implications of implementation of health policies.  Cross listed with MPH 692  3 semester hours.  Typically offered Spring Term.

Health Science

HLSC 291  Medical Terminology.  Introduction of medical terms for each body system and specialty medical fields.  Includes word roots, prefixes and suffixes commonly encountered in the health care field.  Fall, Spring, Summer.  2 semester hours.  Typically offered Fall, Spring, and Summer Terms.  Consent Required.  Course Repeatable. Maximum number of units allowed 99.

HLSC 300  Practicum Experience in Veterinary Medicine.  The Practicum provides 75 hours of observation for the specific Healthcare career.  The observation is in a variety of clinical sites and/or private practice offices.  Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University.  Each semester.  2 semester hours.  Consent Required.

HLSC 301  Practicum Experience: Medicine.  The Practicum provides 75 hours of observation for the specific Healthcare career.  The observation is in a variety of clinical sites and/or private practice offices.  Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University.  Each semester.  2 semester hours.  Consent Required.

HLSC 302  Practicum Experience - Dentistry.  The Practicum provides 75 hours of observation for the specific Healthcare career.  The observation is in a variety of clinical sites and/or private practice offices.  Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University.  Each semester.  2 semester hours.  Consent Required.
HLSC 303 Practicum Experience - Occupational Therapy. The Practicum provides 75 hours of observation for the specific Healthcare career. The observation is in a variety of clinical sites and/or private practice offices. Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University. Each semester. 2 semester hours. Consent Required.

HLSC 305 Practicum Experience - Podiatry. The Practicum provides 75 hours of observation for the specific Healthcare career. The observation is in a variety of clinical sites and/or private practice offices. Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University. Each semester. 2 semester hours. Consent Required.

HLSC 307 Practicum Experience - Physical Therapy. The Practicum provides 75 hours of observation for the specific Healthcare career. The observation is in a variety of clinical sites and/or private practice offices. Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University. Each semester. 2 semester hours. Consent Required.

HLSC 309 Practicum Experience - Optometry. The Practicum provides 75 hours of observation for the specific Healthcare career. The observation is in a variety of clinical sites and/or private practice offices. Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University. Each semester. 2 semester hours. Consent Required.

HLSC 310 Practicum Experience - Chiropractic. The Practicum provides 75 hours of observation for the specific Healthcare career. The observation is in a variety of clinical sites and/or private practice offices. Prerequisite: Instructor Consent, 3.2 GPA, 30 hours completed at Benedictine University. Each semester. 2 semester hours. Consent Required.

HLSC 321 Fitness Testing. Laboratory and field-based testing of selected physiological parameters of the human. Exercise leadership principles and skills are emphasized. Fall. Prerequisite: Must be accepted into the 4 + 1 Clinical Exercise Physiology graduate program to register. Crosslisted with EXPH 521. 1 semester hour. Consent Required.


HLSC 360 Advanced Cardiovascular and Respiratory Physiology. In depth study of the normal functioning of the cardiovascular and respiratory systems. Emphasis is placed on the acute effects of exercise as well as the adaptations that occur as a result of exercise. Fall. Prerequisite: BIOL 258. Crosslisted with EXPH 560. 3 semester hours. Typically offered Fall Term. Consent Required.

HLSC 361 Cardiopulmonary Pathophysiology and Prevention. Study of the disease and progression of cardiovascular and respiratory system diseases. Programs for primary and secondary prevention will be discussed. Spring. Prerequisite: HLSC 360/ EXPH 560. Crosslisted with EXPH 561. 3 semester hours. Typically offered Spring Term.
HLSC 380 Current Topics in Exercise Physiology. An introduction to the research literature in exercise physiology with special emphasis on research design, statistical analysis, and epidemiology, providing the basis for literature discussion in other courses. Other topics relevant to the exercise physiology program will be addressed in this forum. Fall. Not a science elective for HLSC majors. Crosslisted with EXPH 580. 2 semester hours. Writing Intensive Course. Typically offered Fall Term. Consent Required.

HLSC 389 Health Sciences Research. Students desiring more intensive original research, with extensive requirements for laboratory or clinical facilities may use this as an extension of practicum, internship and other courses in this section. 1-3 semester hours. Consent Required.

HLSC 390 Internship. Practical experience in exercise physiology in various settings such as Villa St. Benedict, hospitals, rehabilitation centers, YMCAs, colleges and corporations under the supervision of an experienced on-site professional. Internships available in wellness/fitness, rehabilitation, diagnostics or research. Each Semester. 1-2 semester hours. Typically offered Fall, Winter, and Spring Terms. Consent Required.

HLSC 391 Selected Topics in Health Sciences. Special courses in the health fields with which the student has not become aquatinted in formal course work. May be an extension of or a supplement to material previously encountered, or lectures from a completely new area. Prerequisite: Department Consent. Periodically. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

HLSC 392 Exercise Biochemistry and Metabolism. Principles of biochemistry and metabolism of biomolecules as they pertain to rest and exercise. Interconversion of nutrients and their usage, integration of hormones and their metabolic effects on each organ system will be emphasized. Spring. Prerequisite: BCHM 251 or 261 or 361 or CHEM 103. Cross listed with HLSC 392/EXPH 591. 3 semester hours. Typically offered Spring Term.

HLSC 395 Independent Study. Prerequisite: Department Consent. Periodically. 1-3 semester hours. Consent Required.

History

HIST 101 Western Civilization to 1715. An integrated survey of the development and interaction of the centers of civilization throughout the Western world to 1715. Periodically. IAI H2 901. 3 semester hours. Typically offered Periodically.

HIST 111 American History to 1865. Covers the Colonial era, the revolutionary age, internal growth of the Republic, and causes of the Civil War. Fall. IAI H2 904; S2 900; HST 911. 3 semester hours. Typically offered Fall Term.

HIST 112 American History since 1865. Covers the industrialization of America; the organization of labor; the development of imperialism; the growth of foreign policy. Spring. IAI H2 905; S2 901; HST 912. 3 semester hours. Typically offered Spring Term.

HIST 200 Introduction to American Studies. This course uses elements of fictin and non-fictin in the study of various topics of race, class and gender in American Studies. (Topics vary). Fall. Cross-listed with GBLS 200 3 semester hours.

HIST 203 Historiography. Introduction to the methodology and practice of history and to some of the great historians. Includes an emphasis on world history. Prerequisite: HIST 111, HIST 112. 3 semester hours. Writing Intensive Course.
HIST 205  American Economic History. Analysis of the growth of the U.S. economy and the role of government, business and labor.  3 semester hours.

HIST 206  Modern European Economic History. Analyzes the evolution of manufacturing, agriculture, demography and international trade of Europe since 1500.  3 semester hours.

HIST 210  Africa to 16th Century. Surveys early African civilization and formation and development of major kingdoms.  3 semester hours.

HIST 211  Modern Africa. Surveys the major historical and cultural developments in Africa from the 19th century to the present.  3 semester hours.

HIST 212  Colonial Latin America, 1492-1821. Surveys the pre-colonial societies (Olmec, Toltec, Aztec, Maya, Inca) that shaped the Americas prior to the coming of the Europeans, the European conquest of the Americas, the establishment of colonial societies in the Americas, through the nineteenth century wars of independence and ending with the demise of the Spanish empire in the Americas, the Cuban-Spanish War (1895-1898).  3 semester hours.

HIST 213  Contemporary Latin America, 1898-2000. Beginning with the creation of independent nation states in Latin America, this course will survey the social processes, issues and events that have given rise to contemporary Latin America as well as the impact of Latin America on the wider world.  3 semester hours.

HIST 214  The African Diaspora in Latin America, 1492-1899. An interdisciplinary course that explores the African diaspora in Latin America from the conquest of the Americans by Europeans through the end of the century. Examines how Africans and their descendents in conflict and in concert with Native Americans, Europeans and Asians have created new cultures, religions and societies in the Americas.  3 semester hours.

HIST 215  The African Diaspora in Latin America, 1899-2000. An interdisciplinary course that explores the experiences of people of African descent in Latin America focussing on the fight for independence of Latin American and the continuing struggle for economic and social equality in contemporary Latin America.  3 semester hours.

HIST 220  The Mediterranean World. Studies the ancient cultures located around the Mediterranean Sea and the contributions they made to the development of western civilizations to about 500 A.D. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" as reflected in religion, art, philosophy, and social, political, and economic institutions. IAI H9 900. Prerequisite: Social Science or History major  3 semester hours.

HIST 223  Constitutional History of England. The growth and change of the English constitution from late Roman times to the present.  3 semester hours.

HIST 230  The Baptism of Europe. Studies the development and Christianization of Europe in the Middle Ages (500-1500 A.D.). Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" through social structures (religious, political, economic) and through the interactions and/or conflicts between people and cultures (Eastern and Western Christianity; Christianity, Judaism, Islam). IAI H9 900.  3 semester hours.
HIST 240  Converging Hemispheres. Studies the increasingly global encounter of peoples, ideas, and cultures from the Age of Exploration (from 1400 A.D.) into the Twentieth century. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the shift in emphasis from "person in community" the values of freedom, equality, and responsibility. Examines the construction of the modern era focusing on scientific revolutions, economic transformation, religious reformations, and revolution, resistance and republicanism. 3 semester hours.

HIST 242  19th Century Church History. Studies the European Church's reaction to the French Revolution and scientific theories and the social questions of the 19th century. Analyzes the roots of contemporary developments in the church. 3 semester hours.

HIST 243  20th Century Church History. Analyzes the impact of 19th century developments, the world wars, decolonization, intellectual trends, and Vatican II's origins and results. 3 semester hours.

HIST 251  The French Revolution in the Wider World. Examines the intellectual and political dimensions of the French Revolution as well as the intellectual and political ramifications of that revolution in the wider world. The course will focus on the French Revolution as a generative factor in the wars of independence in the Americas, the Haitian Revolution, the European revolutions of 1848 and the Paris Commune. 3 semester hours.

HIST 252  19th Century Europe. Covers the political, military, economic, social, and cultural development of Europe from the French Revolution to 1900. 3 semester hours.

HIST 253 20th Century Europe, 1900 - Present. Covers the political, military, economic, social, and cultural development of Europe, including the Soviet Union, from 1900 to the present. 3 semester hours.

HIST 254  Modern Eastern Europe. Survey of the cultural and historical development of the peoples of Eastern Europe. Covers nationalism, independent states in the inter-war period. Communist control of Eastern Europe, collapse of communism, and the struggle for democracy. 3 semester hours.

HIST 255  Modern Russia. Surveys Russia in the 20th century, including the rise of the Communist Party, the 1917 revolution, Stalinism, de-Stalinization, Gorbachev, perestroika, and the break-up of the Soviet Union. 3 semester hours.

HIST 257  20th Century Social and Political Movements in a Global Context. Explores the major social and political movements that have shaped the world in the twentieth century, such as the Mexican, Russian, Chinese and Cuban Revolutions, populist, revolutionary nationalist and liberation movements in Africa and Latin America as well as the contemporary civil rights and women's movements in the United States. 3 semester hours.

HIST 260  Women in American Society. Examines women's roles in American life and the ways in which they have shaped society, culture and politics. Topics include the major experience of women from the colonial era to the present; gender ideology and the changing images of women; the diversity of race, class and religion. 3 semester hours.

HIST 261  Revolution and Jeffersonian Eras: 1763 -1828. Analyzes the causes of the Revolution, origins of the Constitution and early development of the new nation. 3 semester hours.

HIST 262  Antebellum America, 1824-1877. This course examines the economic, political and cultural changes in the United States, culminating in the Civil War. The primary focus of the course is slavery and the battle to dismantle the peculiar institution. 3 semester hours.
HIST 263 20th Century America to World War II. Analyzes the impact of the later industrialization, reform movements, World War I, Depression and New Deal, World War II. 3 semester hours.

HIST 264 America Since World War II. Discusses the impact of World War II, the Cold War, the affluent society, and contemporary society. 3 semester hours.

HIST 265 African-American History. Surveys the major events in Black history from 1619 to present. Topics include origins of slavery, Blacks in the American Revolution, Civil War and Reconstruction, Harlem Renaissance, Depression, and the modern Civil Rights movement. 3 semester hours.

HIST 266 Vietnam at War. An intensive, holistic study of the United States' involvement in South East Asia. The course examines the war from the Vietnamese, French and American perspectives, taking into account Vietnamese culture and history, French colonialization, and Cold War ideology and strategy. The course also addresses the anti-war movement and the influence of the counter-culture on US policy. 3 semester hours.

HIST 267 Diplomatic History of the United States. The evolution of American foreign policy, emphasizing the domestic and international background of the U.S. expansion from the American Revolution to America's rise as a great power. 3 semester hours.

HIST 268 Colonial America to 1763. Course examines the early European settlement of North America and the economic, political and social consequences of colonization for Europe, Africa and the Native Americans. 3 semester hours.

HIST 270 Labor and the State, 1877-Present. Examines the growth of industrial America and the struggle of workers to organize. The course follows the labor movement in and its various constituencies, from the AFL-CIO to more radical groups such as the IWW, and their impact on American policy and culture. 3 semester hours.

HIST 271 Modern Middle East. An intensive study of 19th and 20th century Middle-East including 3 semester hours.

HIST 272 Early Islamic Middle East 500-1258. The first of a three course sequence studying the history of the Middle East. The course covers the pre-Islamic Middle East including the conflict between the Eastern Roman and Sasanian empires and focuses on the development of an Islamic civilization that spread throughout the Middle East, North Africa and into Spain under the rule of the two most important Islamic dynasties of this period, the Umayyads and the Abbasids. Relations with neighboring regions including Europe are highlighted including the crusades which began in the late eleventh century and continued in Syria/Palestine through the 13th century. Spring. 3 semester hours.

HIST 273 Gun Powder Empires: Middle East 1200-1800. Introduction to the history of the Islamic world in the half-millennium before the rise of Europe following a chronological and thematic frame. Beginning with the Mongol invasions of the 13th century then the emergence of Turkish war bands of the 14th and 15th centuries while the era of bubonic plague (the 'Black Death') in the middle of the 14th century influences economic and social policies. The final chronological segment is the "imperial age" (from its zenith in the late 16th century to its passing the 18th). Spring term. Cross listed with HIST 373 3 semester hours. Typically offered Spring Term.
HIST 280  The World of Alexander the Great. Course examines the major economic, cultural and political developments during the age of Alexander the Great. The course places Alexander within a global context and also explores the enduring legacy of the period in art, architecture and the development of the ancient world. 3 semester hours. Typically offered Fall Term, Even Years.

HIST 291  Topics. A study of various persons, events, trends, and institutions in European, American or non-Western History. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

HIST 295  Independent Study. Designed to encourage the superior student to study in-depth and to research an area beyond the undergraduate course offerings. Prerequisite: Consent of instructor. 3 semester hours. Consent Required.

HIST 303  Historiography. Introduction to the methodology and practice of history and to some of the great historians. Includes an emphasis on world history. Prerequisite: Hist 111, Hist 112. 3 semester hours. Writing Intensive Course.

HIST 305  American Economic History. Analysis of the growth of the U.S. economy and the role of government, business and labor. 3 semester hours.

HIST 306  Modern European Economic History. Analyzes the evolution of manufacturing, agriculture, demography and international trade of Europe since 1500. 3 semester hours.

HIST 310  Africa to 16th Century. Surveys early African civilization and formation and development of major kingdoms. 3 semester hours.

HIST 311  Modern Africa. Surveys the major historical and cultural developments in Africa from the 19th century to the present. 3 semester hours.

HIST 312  Colonial Latin America, 1492-1821. Surveys the pre-colonial societies (Olmec, Toltec, Aztec, Maya, Inca) that shaped the Americas prior to the coming of the Europeans, the European conquest of the Americas, the establishment of colonial societies in the Americas, through the nineteenth century wars of independence and ending with the demise of the Spanish empire in the Americas, the Cuban-Spanish War (1895-1898). 3 semester hours.

HIST 313  Contemporary Latin America, 1898-2000. Beginning with the creation of independent nation states in Latin America, this course will survey the social processes, issues and events that have given rise to contemporary Latin America as well as the impact of Latin America on the wider world. 3 semester hours.

HIST 314  The African Diaspora in Latin America, 1492-1899. An interdisciplinary course that explores the African diaspora in Latin American from the conquest of the Americans by Europeans through the end of the century. Examines how Africans and their descendants in conflict and in concert with Native Americans, Europeans and Asians have created new cultures, religions and societies in the Americas. 3 semester hours.

HIST 315  The African Diaspora in Latin America, 1899-2000. An interdisciplinary course that explores the experiences of people of African descent in Latin America focussing on the fight for independence of Latin American and the continuing struggle for economic and social equality in contemporary Latin America. Prerequisite: Social Science or History major 3 semester hours.
HIST 320  The Mediterranean World. Studies the ancient cultures located around the Mediterranean Sea and the contributions they made to the development of western civilizations to about 500 A.D. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" as reflected in religion, art, philosophy, and social, political, and economic institutions. 3 semester hours.

HIST 323  Constitutional History of England. The growth and change of the English constitution from late Roman times to the present. 3 semester hours.

HIST 342  19th Century Church History. Studies the European Church's reaction to the French Revolution and scientific theories and the social questions of the 19th century. Analyzes the roots of contemporary developments in the church. Prerequisite: Social Science or History major 3 semester hours.

HIST 343  20th Century Church History. Analyzes the impact of 19th century developments, the world wars, decolonization, intellectual trends, and Vatican II's origins and results. Prerequisite: Social Science or History major 3 semester hours.

HIST 351  The French Revolution in the Wider World. Examines the intellectual and political dimensions of the French Revolution as well as the intellectual and political ramifications of that revolution in the wider world. The course will focus on the French Revolution as a generative factor in the wars of independence in the Americas, the Haitian Revolution, the European revolutions of 1848 and the Paris Commune. 3 semester hours.

HIST 353  20th Century Europe, 1900 - Present. Covers the political, military, economic, social, and cultural development of Europe, including the Soviet Union, from 1900 to the present. Prerequisite: Social Science or History major 3 semester hours.

HIST 354  Modern Eastern Europe. Survey of the cultural and historical development of the peoples of Eastern Europe. Covers nationalism, independent states in the inter-war period. Communist control of Eastern Europe, collapse of communism, and the struggle for democracy. Prerequisite: Social Science or History major 3 semester hours.

HIST 355  Modern Russia. Surveys Russia in the 20th century, including the rise of the Communist Party, the 1917 revolution, Stalinism, de-Stalinization, Gorbachev, perestroika, and the break-up of the Soviet Union. Prerequisite: Social Science or History major 3 semester hours.

HIST 357  20th Century Social and Political Movements in a Global Context. Explores the major social and political movements that have shaped the world in the twentieth century, such as the Mexican, Russian, Chinese and Cuban Revolutions, populist, revolutionary nationalistic and liberation movements in Africa and Latin America as well as the contemporary civil rights and women's movements in the United States. 3 semester hours.

HIST 360  Women in American Society. Examines women's roles in American life and the ways in which they have shaped society, culture and politics. Topics include the major experience of women from the colonial era to the present; gender ideology and the changing images of women; the diversity of race, class and religion. Prerequisite: Social Science or History major 3 semester hours.

HIST 361  Revolutionary and Jeffersonian Eras: 1763 -1828. Analyzes the causes of the Revolution, origins of the Constitution and early development of the new nation. Prerequisite: Social Science or History major 3 semester hours.
HIST 362  Antebellum America, 1824-1877.  This course examines the economic, political and cultural changes in the United States, culminating in the Civil War. The primary focus of the course is slavery and the battle to dismantle the peculiar institution. Prerequisite: Social Science or History major  3 semester hours.

HIST 363  20th Century America to World War II.  Analyzes the impact of the later industrialization, reform movements, World War I, Depression and New Deal, World War II. Prerequisite: Social Science or History major  3 semester hours.

HIST 364  America Since World War II.  Discusses the impact of World War II, the Cold War, the affluent society, and contemporary society. Prerequisite: Social Science or History major  3 semester hours.

HIST 367  Diplomatic History of the United States.  The evolution of American foreign policy, emphasizing the domestic and international background of the U.S. expansion from the American Revolution to America's rise as a great power. Prerequisite: Social Science or History major  3 semester hours.

HIST 370  Labor and the State, 1877-Present.  Examines the growth of industrial America and the struggle of workers to organize. The course follows the labor movement in and its various constituencies, from the AFL-CIO to more radical groups such as the IWW, and their impact on American policy and culture. Prerequisite: Social Science or History major  3 semester hours. Typically offered Fall Term.

HIST 372  Early Islamic Middle East 500-1258.  The first of a three course sequence studying the history of the Middle East. The course covers the pre-Islamic Middle East including the conflict between the Eastern Roman and Sasanian empires and focuses on the development of an Islamic civilization that spread throughout the Middle East, North Africa and into Spain under the rule of the two most important Islamic dynasties of this period, the Umayyads and the Abbasids. Relations with neighboring regions including Europe are highlighted including the crusades which began in the late eleventh century and continued in Syria/Palestine through the 13th century.  Spring.  3 semester hours.

HIST 373  Gun Powder Empires: Middle East 1200-1800.  Introduction to the history of the Islamic world in the half-millennium before the rise of Europe following a chronological and thematic frame. Beginning with the Mongol invasions of the 13th century then the emergence of Turkish war bands of the 14th and 15th centuries while the era of bubonic plague (the 'Black Death') in the middle of the 14th century influences economic and social policies. The final chronological segment is the "imperial age" (from its zenith in the late 16th century to its passing the 18th).  Spring term.  Cross listed with HIST 273  3 semester hours. Typically offered Spring Term, Even Years.

HIST 380  The World of Alexander the Great.  Course examines the world of the Mediterranean 360 BC-320 BC and the rise and fall of alexander the Great.  Course focuses on the cultural, economic, political and social history of the period.  3 semester hours. Typically offered Fall Term, Odd Years.
HIST 391 Topics. Directed readings and research to be used in discussions pertaining to specific topics in European, American or non-Western history. Prerequisite: Social Science or History major, Junior or Senior standing  3 semester hours. Writing Intensive Course.  Consent Required.

HIST 395 Independent Study. Designed to encourage the superior student to study in-depth and to research an area beyond the undergraduate course offerings. Prerequisite: Consent of Instructor, Social Science or History major  1-3 semester hours.  Consent Required. Course Repeatable. Maximum number of units allowed 99.

HIST 397 Internship. Practical experiences in a related career field under the supervision of the History Department. Prerequisite: Department Consent, 3.00 GPA, Social Science or History major  3 semester hours.  Consent Required.

HIST 399 Senior Thesis. Senior capstone experience. Pre-requisite: GBLS 101 and GBLS 102 or senior standing. Spring.  3 semester hours.

Honors

HNRS 190 First-Year Colloquium I. Students develop communications, research, and leadership skills while reading great works of literature. Passing HNRS-190 meets the University's HUMN-101 and WRIT-101 requirements.  3 semester hours.  Consent Required.

HNRS 191 First-Year Colloquium II. Students develop communications, research, and leadership skills while reading great works of literature. Passing HNRS-191 meets the University's WRIT-102 and SPCH-110 requirements.  3 semester hours.  Consent Required.

HNRS 195 Organizational and Group Dynamics. Presents leadership theory and helps students understand themselves as leaders. Topics include group dynamics, assertiveness, trust and risk-taking, problem solving, delegation, and motivation.  3 semester hours.  Consent Required.

HNRS 220 The Mediterranean World. Studies the ancient cultures located around the Mediterranean Sea and the contributions they made to the development of western civilizations to about 500 A.D. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" as reflected in religion, art, philosophy, and social, political, and economic institutions. IAI H9 900. Prerequisite: Social Science or History major  3 semester hours.

HNRS 230 The Baptism of Europe. Studies the development and Christianization of Europe in the Middle Ages (500-1500 A.D.). Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" through social structures (religious, political, economic) and through the interactions and/or conflicts between people and cultures (Eastern and Western Christianity; Christianity, Judaism, Islam). IAI H9 900.  3 semester hours.

HNRS 294 Creativity, Art & Culture. A critical examination of classic and contemporary works of art, generating theories concerning artistic creativity. Focus is on works of art and the culture from which art comes. Passing HNRS-294 meets the University's Fine Arts (FNAR) core elective requirement.  3 semester hours. Fine Arts Core Elective.  Consent Required.
HNRS 320  **Converging Hemispheres.**  Studies the increasingly global encounter of peoples, ideas, and cultures from the Age of Exploration (from 1400 A.D.) into the twentieth century. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the shift in emphasis from "person in community" to "individual and society" in terms of social identity and the values of freedom, equality, and responsibility. Examines the construction of the modern era, focusing on scientific revolutions, economic transformations, religious reformation, and revolutions, resistance, and republicanism. 3 semester hours.

HNRS 393  **Global Interdependence.**  Upper-level study of political themes, with special attention to the 20th century. Passing HNRS-393 meets the University's Political Science / Anthropology (PLSC / ANTH) core elective requirement as well as the HUMN-250 Contemporary World requirement. 3 semester hours. Psychology/Sociology Core Elec.

HNRS 395  **Independent Study.**  Students with interest in independent study of topics not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval based on academic appropriateness and availability of resources. Prerequisite: Approval of Scholars Program Director. 1-3 semester hours.  Consent Required. Course Repeatable. Maximum number of units allowed 99.

HNRS 397  **Internship.**  Practical experiences in a prospective career field under the supervision of the Scholars Program. Prerequisite: Approval of Scholars Program Director. 3 semester hours.  Consent Required.

Hpe

HPE 195  **Motor, Learning and Human Motion.**  North Central College course 3 semester hours.

Humanities

HUMN 100  **Critical Reasoning.**  Discussion sessions on gaining critical understanding of readings in the first-year seminar. Integrates critical thinking and study strategies in a meaningful context. Emphasis on: analyzing, synthesizing, and evaluating terminology, concepts and arguments. 1 semester hour.  Consent Required.

HUMN 200  **Climate Change - Semester Interdisciplinary Course.**  A Meta Course taught by instructors participating in the Climate Change Semester and open only to those students enrolled in participating classes. Course starts mid-semester and covers varied topics related to climate change. A service learning component is included. Consent needed to enroll. 2 semester hours.  Consent Required.

HUMN 201  **Climate Change: Interdisciplinary Seminar.**  new 2011 1 semester hour.

HUMN 210  **Cultural Heritage Seminar.**  This seminar course is designed around the great books and texts of the Benedictine, Judeo-Christian and Abrahamic tradition(s). It can provide HUMN 220, HUMN 230 or HUMN 240 humanities credit for transfer students only. Pre-requisite: Must be a transfer student. 3 semester hours. Typically offered Fall, Winter, and Summer Terms.
HUMN 220  The Mediterranean World. Studies the ancient cultures located around the Mediterranean Sea and the contributions they made to the development of western civilizations to about 500 A.D. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" as reflected in religion, art, philosophy, and social, political, and economic institutions. IAI H9 900. Prerequisite: Social Science or History major. 3 semester hours.

HUMN 230  The Baptism of Europe. Studies the development and Christianization of Europe in the Middle Ages (500-1500 A.D.). Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" through social structures (religious, political, economic) and through the interactions and/or conflicts between people and cultures (Eastern and Western Christianity; Christianity, Judaism, Islam). IAI H9 900. 3 semester hours.

HUMN 240  Converging Hemispheres. Studies the increasingly global encounter of peoples, ideas, and cultures from the Age of Exploration (from 1400 A.D.) into the Twentieth century. Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the shift in emphasis from "person in community" the values of freedom, equality, and responsibility. Examines the construction of the modern era focusing on scientific revolutions, economic transformation, religious reformations, and revolution, resistance and republicanism. 3 semester hours.

HUMN 250  The Contemporary World. Drawing upon the resources of the Catholic and Benedictine traditions, this course examines a variety of interpretations of the current world situation in light of the theme “person in community.” Have the notions of person and community changed, or are they being changed through current political, economic, cultural and technological challenges? Must have completed over 60 credit hours. 3 semester hours. Writing Intensive Course.

HUMN 291  Topics in Humanities. Special topics offered by visiting lecturers and/or practitioners in the arts and humanities. Content will vary depending on the topic and instructor. 1-3 semester hours.

HUMN 391  Topics in Humanities. Special topics offered by visiting lecturers and/or practitioners in the arts and humanities. Content will vary depending on the topic and instructor. 1-3 semester hours.

International Business

INTB 101  The Global Economy. This core course examines the concept of globalization from an international business and economic perspective. Special attention is paid to the political, legal, cultural and technological forces that affect and are affected by this phenomenon. 3 semester hours. Business Core Elective.

INTB 220  Area Studies. Cultural, economic and business conditions of different world regions. Prerequisite: ECON 101, junior standing and consent of instructor. (Periodically) 3 semester hours. Typically offered Periodically. Consent Required.

INTB 291  Topics. This course examines such topics as globalization, international trade and investment, offshoring of production, and the impact of international business on culture. (Periodically) 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.

INTB 292  Business Anthropology: Culture and International Business. Introduction to the impact of cultural variation on the functional areas of business with emphasis on globalization and the development of the world system. 3 semester hours. Anthropology Core Elective.
INTB 297  Internship. An internship with a company, not-for-profit organization, or government agency in an international business capacity. This may involve companies in the U.S. or abroad. Students that complete internships in the United States must arrange an internship that involves some aspects of international operations. Prerequisite: Permission of the department or of the instructor. 2-6 semester hours. Consent Required.

INTB 300  Introduction to International Business. This course is designed to introduce students to the importance and role of international business. Predominant themes will be culture and business opportunities. Topics include international trade, balance of payments, multinational corporations and the functional areas of international business. (Fall) 3 semester hours. Typically offered Fall Term.

INTB 302  International Management. Study of the dynamics involved in international business management. Explores key issues such as political, legal and labor environments, strategic planning and organizational design. Emphasis is placed on the role of managers and others in successful international operations. (Spring) 3 semester hours.

INTB 320  Area Studies. Cultural, economic and business conditions of different world regions. Periodically. Prerequisite: ECON 101, consent of instructor. 3 semester hours. Business Core Elective. Typically offered Periodically. Consent Required.


INTB 340  Global Logistics. This course introduces students to the changing and increasingly important role of logistics in the global business arena. Students will explore the areas of inventory planning and management, supply chain integration, transportation and distribution, and warehousing; logistics information systems architectures and implementation strategies; and logistics organization design alternatives. (Periodically.) 3 semester hours. Typically offered Periodically.

INTB 350  International Marketing. Studies strategic issues in marketing products and services across national borders. Examines cultural, legal, ethical, and economic constraints. Prerequisite: INTB 300 or MKTG 300. 3 semester hours.

INTB 351  Global Development Issues. A study of the meaning, measurement and historical context of economic development and the issues underlying the vast differences in development between nations of the world. Topics covered include population, agriculture, industry, trade and foreign debt. (Periodically) 3 semester hours. Typically offered Periodically.

INTB 360  International Trade and Finance. Trade theory, trade barriers, Balance of payments, Exchange Rates, Open-Economy Macroeconomics. Prerequisite: ECON 101, ECON 310, and "C" or better in MATH 115. 3 semester hours.

INTB 370  Multinational Corporate Finance. Stresses the financial decision-making of a firm in an international setting. Covers international financial markets, exchange risk management, asset and liability management, and international banking. Pre-requisite: ECON 101, ECON 102, ACCT 111. Spring. 3 semester hours. Typically offered Spring Term.
INTB 371  International Negotiations. This course aims to introduce students to the theoretical basics of joint problem-solving negotiation, with a particular emphasis on cross-cultural negotiation. As the emphasis here is on learning by doing, students will be lead through a variety of simulations that represent a variety of negotiation settings. (Periodically). 3 semester hours. Typically offered Periodically.

INTB 375  Global Interdependence. Politics of international economics and economic determinants of international politics in a globally interdependent world. (Periodically) 3 semester hours. Typically offered Periodically.

INTB 380  Global Strategic Management. This course, as the capstone to the International Business and Economics major, should come after students have studied all basic aspects of international business. The course focuses on multinational corporate strategies. Using a computer simulation and the case study method, students will apply the concepts of accounting, finance, marketing, and management to the development of an international strategic plan. Prerequisite: Senior standing and consent of instructor. 3 semester hours. Writing Intensive Course. Consent Required.

INTB 391  Topics. This course examines such topics as globalization, international trade and investment, offshoring of production, and the impact of international business on culture. (Periodically) 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.

INTB 395  Independent Study. Directed readings, independent research, or student projects on areas of individual academic interest; topics, meeting times, and outcomes arranged with instructor. Prerequisite: Permission of the department or of the instructor. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

INTB 397  Internship. An internship with a company, not-for-profit organization, or government agency in an international business capacity. This may involve companies in the U.S. or abroad. Students that complete internships in the United States must arrange an internship that involves some aspects of international operations. Prerequisite: Permission of the department or of the instructor. 2-6 semester hours. Consent Required.

International Student Orientation

IPO 100  International Student Orientation. This class will introduce international students to practical cultural differences that exist between the United States and many countries. Topics to be discussed include health care, university facilities and resources, income taxes and employment. Pre-requisites: enrollment as an international student. Cross listed with IPO 400  Typically offered Fall, Spring, and Summer Terms. Course Repeatable. Maximum number of units allowed 0.

Ipro

IPRO 320  Olympia Fields Bridge Design. IIT course 3 semester hours. Consent Required.

LITR 100  Introduction to Literary Analysis.  Introduction to literary study and criticism.  Focus on genres, techniques and development of literature.  Emphasis on critical reading and writing. Introductory course for Literature majors; prerequisite for 300-level Literature courses. Spring.  3 semester hours. Typically offered Spring Term.

LITR 210  Literature and Film.  Selected literary texts and their representation on film; analysis of the relationship between the two genres, and differences between written texts and visual media. Spring, odd years.  3 semester hours. Literature Core Elective. Typically offered Periodically.

LITR 250  Medieval Literature.  Study of literature from the medieval era of British history. Students will learn to read Old English and/or Middle English; texts to be studied may include work by Chaucer, the Gawain poet, Langland, medieval dramatists, and other major writers. Counts as pre-1800. Fall, odd years.  3 semester hours. Literature Core Elective. Typically offered Fall Term, Odd Years.

LITR 255  American Literature I.  Survey of American literature from its Colonial roots, particularly the influence of the Puritans, to its flowering in New England. Counts as pre-1800. Fall.  3 semester hours. Literature Core Elective. Typically offered Periodically.

LITR 256  American Literature II.  Survey of American literature since the Civil War.  Emphasis on development of Realism and Naturalism in the nineteenth century, and modernism in the twentieth.  Counts as post-1800. Spring.  3 semester hours. Literature Core Elective. Typically offered Spring Term.

LITR 257  British Literature I.  Historical survey of representative British literary texts from the Anglo-Saxon period to 1800, with attention to modes of critical reading and development of important genres.  Counts as pre-1800. Fall. IAI H3 912.  3 semester hours. Literature Core Elective. Typically offered Fall Term.

LITR 258  British Literature II.  Historical survey of representative British and Anglophone literary texts from 1800 to the present, with attention to the larger cultural context and contemporary modes of literary analysis.  Counts as post-1800. Spring. IAI H3 913.  3 semester hours. Literature Core Elective. Typically offered Spring Term.

LITR 259  World Literature.  Comparative study of major works of the Ancient World, Middle Ages, Renaissance, Enlightenment, Romantic Age, periods of Realism and Naturalism, and Modern World. Fall, even years. IAI H3 907.  3 semester hours. Literature Core Elective. Typically offered Fall Term, Even Years.

LITR 263  Literature of the Early Modern Period.  Selected literary and cultural texts drawn from the late sixteenth to the eighteenth centuries. Places these texts in the context of emerging modernity. Counts as pre-1800. Spring, odd years.  3 semester hours. Literature Core Elective. Typically offered Spring Term, Odd Years.

LITR 264  Global/Postcolonial Literature and Theory.  A comparative study of literature and theory concerning colonial, postcolonial, third world, and diasporic cultures and communities.  The course may include such topics as education and the colonial/postcolonial condition; intellectual culture and imperialism; the politics of tourism, identity and diaspora; travel, migration, and globalization; and trauma, genocide, and historical fiction.  Counts as diversity elective for majors.  Offered spring, odd years.  3 semester hours. Literature Core Elective. Typically offered Spring Term, Odd Years.

LITR 265  Shakespeare.  Critical reading of representative comedies, tragedies, and histories.  Emphasis on such issues as his dramatic art, critical response, and role in constructions of literary culture.  Counts as pre-1800. Spring, even years. IAI H3 905.  3 semester hours. Literature Core Elective. Typically offered Spring Term, Even Years.
LITR 266 Studies in the Novel. Critical study of selected novels, with emphasis on British and American writers and forms in English; theories of the novel as literary genre. Topics will vary. Spring, odd years. 3 semester hours. Literature Core & Writing Inte. Typically offered Spring Term, Odd Years.

LITR 267 Studies in Poetry. Critical study of selected poetry, with attention to both formal and interpretive issues; theories of poetry as literary genre. Topics will vary. Spring, even years. IAI H3 903; EGL 915. 3 semester hours. Literature Core & Writing Inte. Typically offered Spring Term, Even Years.

LITR 268 Studies in Drama. Critical study of selected dramatic literature from a range of cultures and periods; theories of drama as literary genre. Topics will vary. Fall, odd years. IAI EGL 916. 3 semester hours. Literature Core & Writing Inte. Typically offered Fall Term, Odd Years.

LITR 269 Introduction to Creative Writing. Writing workshop for students; introduction to various forms of modern fiction and poetry. Students will have the opportunity to create original poetry and fiction. Applicable as Fine Arts Core Elective. Fall, odd years. 3 semester hours. Fine Arts Core Elective. Typically offered Fall Term, Odd Years.

LITR 279 U. S. Multiethnic Literature. A comparative study of literature reflecting the diversity of American culture. In our exploration of just a sampling of the multiple voices of U. S. literature, we will consider these narratives within specific historical, cultural, rhetorical, and literary contexts. Counts as diversity elective for majors. Fall, even years. IAI H3 910D; EGL 918. 3 semester hours. Literature Core Elective. Typically offered Fall Term, Even Years.

LITR 280 African-American Literature. Historical and critical exploration of African-American writers' contributions to American fiction, poetry, drama, and non-fiction, from the oral tradition to the present. May include an Afrocentric approach. Counts as diversity elective for majors. Spring, even years. 3 semester hours. Literature Core Elective. Typically offered Spring Term, Even Years.

LITR 281 Gender and Literature. Introduction to gender studies as a mode of literary analysis, and to the role of literary texts in shaping gender constructions. Counts as diversity elective for majors. Fall, even years. IAI H3 911D. 3 semester hours. Literature Core Elective. Typically offered Fall Term, Even Years.


LITR 301 Advanced U.S. Literary and Cultural Studies. Explores critical questions, analytical categories, and common methodologies that structure the practice of U.S. literary and cultural studies. Students will work with primary literary texts as well as secondary sources and theoretical works. Students will also complete a research paper. Prerequisite: LITR 100. Offered fall, even years. 3 semester hours. Typically offered Fall Term, Even Years.

LITR 305 Critical Theory. Survey and application of contemporary theories of literature and language. Covers the intersection of modern literary theory with philosophy, linguistics, psychology, anthropology, and other humanistic fields. Fall, odd years. Prerequisite: LITR 100. 3 semester hours. Typically offered Fall Term, Odd Years.
LITR 307  **Modern English Language.** Study of traditional, structuralist, and transformational theories of grammar and language, with attention to practical applications for language instruction. Includes introduction to contemporary linguistic theory. Fall, even years. Prerequisite: LITR 100. 3 semester hours. Typically offered Fall Term, Even Years.

LITR 315  **American Literary Realism and Naturalism.** This course provides advanced study of U.S. realist and naturalist literature of the nineteenth and twentieth centuries. Counts as Post-1800. Pre-requisite: LITR 100. Offered Spring, even years only. 3 semester hours. Typically offered Spring Term, Even Years.

LITR 322  **Reading, Writing and Thinking in the Middle and Secondary School Curriculum.** Examines the relationship between reading, writing, oral communication and thinking and explores strategies for integrating these areas across the curriculum. Examines a variety of theoretical perspectives and instructional strategies involving simulation, role-playing, case studies, inquiry, problem-solving, critical thinking and environmental learning. Lesson and unit plan development emphasized. Spring. Pre-requisite: Cumulative G.P.A. of 2.5 and TEP. 3 semester hours. Typically offered Spring Term.

LITR 352  **Young Adult and Multicultural Literature in the Middle and Secondary School Curriculum.** Evaluation, selection and teaching of literature to serve the interests and reading needs of students from the middle-school through high school. The course includes literature which reflects the culture and heritage of America’s multiethnic/multicultural population. The course emphasizes theory and research in reading comprehension, literary criticism, including reader response and curriculum and instruction. In addition, the course includes critical analysis, methods of teaching literature and the uses of literature in the curriculum. Periodically. Prerequisite: Cumulative G.P.A. of 2.5 and TEP. 3 semester hours. Typically offered Periodically.

LITR 364  **Global/Postcolonial Literature and Theory.** A comparative study of literature and theory concerning colonial, postcolonial, third world, and diasporic cultures and communities. The course may include such topics as education and the colonial/postcolonial condition; intellectual culture and imperialism; the politics of tourism; identity and diaspora; travel, migration, and globalization; and trauma, genocide, and historical fiction. Counts as diversity elective for majors. Pre-requisite: LITR 100. Offered spring, odd years. 3 semester hours. Literature Core Elective. Typically offered Spring Term, Odd Years.

LITR 369  **Creative Writing: Fiction.** Advanced writing workshop with focus on writing and revision of fiction: includes group discussions and individual conferences. Students will produce a professional portfolio of fiction. Fall, even years. Prerequisite: LITR 269. 3 semester hours. Typically offered Fall Term, Even Years.

LITR 370  **Creative Writing: Poetry.** Advanced writing workshop with focus on writing and revision of poetry: includes group discussions and individual conferences. Students will produce a professional portfolio of poetry. Spring, even years. Prerequisite: LITR 269. 3 semester hours. Typically offered Spring Term, Even Years.
LITR 381  Theories of Gender in Literary Analysis.  Advanced readings in literature and in selected gender-based modes of textual analysis, as well as theories of the relationship between gender and language.  Counts as diversity elective for majors.  Spring, odd years. Prerequisite: LITR 100.  3 semester hours. Typically offered Spring Term, Odd Years.

LITR 385  Major Authors and Genres. New course fall 2011  3 semester hours.

LITR 391  Advanced Topics in Literature. Advanced study of authors, themes, movements, and genres; attention to historical context. Sample topics: Literature and the Environment, Women Writers of Color, Satire, focused study of major author. Periodically. Prerequisite: LITR 100.  3 semester hours. Typically offered Periodically.  Course Repeatable. Maximum number of units allowed 99.

LITR 395  Independent Study. Students with interest in independent study of topics not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval based on academic appropriateness and availability of resources. Prerequisite: LITR 100 and junior or senior standing.  3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

LITR 399  Senior Seminar. Group workshop and individual instruction in literary research and critical writing, leading up to the completion of a major paper in a literary field of the student's choice. Fall. Prerequisite: Senior standing, LITR 100.  3 semester hours. Typically offered Fall Term.

Management & Organizational Behavior

MGT 110  Business Principles and Skills for Academic Success. Introductory course for adults pursuing an Associate's degree. Academic success topics include learning styles, group interaction, written and oral communication skills, research and critical thinking skills, and time management. This course also includes a survey of business structures and operations. Other topics include the role of consumers in business, social responsibility within business organizations, and specialized business fields. Pre-requisite: Admission into the Adult Associate of Arts Program.  3 semester hours.

MGT 120  "Going Green" in the Business World. How can workers on the job influence their employers to adopt green practices? What business tools can you use to take great ideas and make them into sustainable programs? This course shows what can work, depending on the type of business, using case examples. These tools include implementing the LEED program in new and existing buildings (i.e.: insulation, solar panels, lighting, recycling, composting, landscaping, etc.), transportation programs for employees (i.e.: car pooling, mass transit, bicycling, walk to work) and cap and trade markets for emission credits to reduce energy consumption. You will learn a variety of business frameworks and tools to influence business leader's decisions about environmental sustainability. As a result of this course, you will better understand how you can make a difference! Fall and Spring.  1 semester hour. Typically offered Fall and Spring Terms.

MGT 150  Business Statistics I. Basic course in statistical technique; includes measures of central tendency, variability, probability theory, sampling, estimation, and hypothesis testing. IAI M1 902; BUS 901. Fall semesters. Prerequisite: Math 105 or Math 110  3 semester hours. Typically offered Fall Term.

MGT 210  Management. An overview of the fundamentals of management and leadership and their impact on the modern corporation. The course is a combination of theory and practical application, offering the student an opportunity to learn about the nature of management, leadership, and cultural diversity issues. Fall and Spring semester. Prerequisite: sophomore standing  3 semester hours. Typically offered Fall and Spring Terms.
MGT 217  Group Dynamics and Learning Strategies. This course provides an overview of organizational structure, group dynamics, and learning strategies. Prerequisite: Admission to the Adult Learning Team or Online Program. 3 semester hours.

MGT 220  Entrepreneurship (Capstone). Application of business principles to planning, organizing and operating the entrepreneurial enterprise. 3 semester hours.

MGT 234  Organizational Planning & Analysis. Provides a basic understanding of key concepts and an ability to use basic analytical tools related to financial, economic and marketing planning. Topics include revenues, costs, supply and demand, pricing and the development of products and services to meet market needs. 3 semester hours.

MGT 235  Business Law I. Introduction to the role of the legal system in our society with an emphasis on the law of contracts, sales, and agency. 3 semester hours.

MGT 236  Business Law II. Introduction to the role of the legal system in our society with an emphasis on the law of commercial paper, partnership, and corporations. 3 semester hours.

MGT 237  Business Communications. Theory and practice of communication within and between business organizations of all types. Focus on the training for and development of entry-level skills in communication and its related technology. 1-3 semester hours. Writing Intensive Course. Consent Required.

MGT 247  Ethical Leadership. This course is an overview of management at the strategic and tactical levels. It reviews various models of leadership, ethics involved in that leadership, strategies, and skills. Prerequisite: Admission to the Adult Learning Team or Online Program. 3 semester hours. Writing Intensive Course.

MGT 251  Business Statistics II. Covers: Regression and correlation, analysis of variance, and nonparametric statistics. Spring semester. Prerequisite: MGT 150 3 semester hours. Typically offered Spring Term.

MGT 252  Business Ethics in the Context of Catholic Social Teaching. This course is designed to give the student knowledge of the range of ethical theories that currently govern behavior in business, why ethics are necessary to business and how ethics influence corporate success. Cross listed with THEO 252. Offered Fall and Spring. 3 semester hours. Religious Studies Core Elect. Typically offered Fall and Spring Terms.

MGT 255  Readings in Organizational Research. Introduces methods of systematic investigation which are needed to provide continued development of the body of knowledge upon which the disciplines of management and organizational behavior are based. Focus is on an understanding of the research process in organizations, its value and its limitations. 3 semester hours.

MGT 260  Fundamentals of Human Resource Management. This course will focus on: developing, contributing to, and supporting the organization's mission, vision, values, strategic goals, and objectives; formulating policies; guiding and leading the change process; and evaluating HR's contributions to organizational effectiveness. Offered yearly, rotating terms. 3 semester hours.
MGT 262 Employee Recruitment Strategies. This course will focus on developing, implementing and evaluating sourcing, recruitment, hiring, orientation, succession planning, retention, and organizational exit programs necessary to ensure the workforce's ability to achieve the organization's goals and objectives. Offered each term, yearly. 3 semester hours.

MGT 264 Employee Performance and Appraisal Management. This course will focus on developing, implementing and evaluating activities and programs that address employee training and development, performance appraisal, talent and performance management, and the unique needs of employees to ensure that the knowledge, skills, abilities, and performance of the workforce meet current and future organizational and individual needs. Offered: each term, yearly. 3 semester hours.

MGT 266 Essentials of Compensation and Benefits. This course will focus on developing, selecting, implementing, administering, and evaluating compensation and benefits programs for all employee groups that support the organization's strategic goals, objectives, and values. Offered: each term, yearly. 3 semester hours.

MGT 268 Managing Workplace Relationships. This course will focus on analyzing, developing, implementing, administering and evaluating a broad range of workplace relationships. Functional areas include techniques for facilitating positive employee relations, positive employee relations strategies, and non-monetary rewards, motivation concepts and applications, and employee involvement strategies. (For example: employee management committees, self-directed work teams, and staff meetings). Offered: each term, yearly. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

MGT 270 Employment Law and Risk Management. This course will focus on developing, implementing, administering, and evaluating programs, plans, and policies which provide a safe and secure working environment and to protect the organization from liability. Additional focus will be placed on the workplace relationship between employer and employee in order to maintain relationships and working conditions that balance employer and employee needs and rights in support of the organization's strategic goals, objectives, and values. Offered: each term, yearly. 3 semester hours. Typically offered Fall, Winter, Spring, & Summer.

MGT 275 Accounting and Financial Analysis. This course surveys a broad range of financial and managerial accounting techniques used by managers as applied to business and organizational planning, reporting, and control. The financial accounting topics dealt with, from the perspective of the financial statement user, include the basic processes of the accounting information system, transaction analysis, the form and content of financial statements, and financial analysis tools. In the managerial accounting topics we explore the tools of management decision making, including variable costing, cost-volume-profit analysis, performance reporting, and capital budgeting. The emphasis is on understanding rather than on mathematical rigor. The focus is on the analysis and solution of problems that managers normally deal with. Prerequisite: ACCT 112 and Admission to the Adult Learning Team or Online Program. 3 semester hours.

MGT 297 Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 12.

MGT 300 Management. Fundamental principles and practices of the corporate enterprise are utilized to consider planning, organizing, implementing and controlling in management. Fall and Spring semesters. Prerequisite: Sophomore standing 3 semester hours. Business Core & Writing Intens. Typically offered Fall and Spring Terms.
MGT 301  **Entrepreneurship.** Application of business principles to planning, organizing and operating the entrepreneurial enterprise.  3 semester hours.

MGT 302  **International Management.** Study of the dynamics involved in international business management. Explores key issues such as political, legal and labor environments, strategic planning and organizational design. Emphasis is placed on the role of managers and others in successful international operations. (Spring)  3 semester hours.

MGT 303  **Management Labor Relations.** The course focuses on the evolution of employer-employee relations in union and non-union organizations. The emphasis is on union, governmental and workplace policies and practices, history, functions, forecasted changes relating to labor and management in both public and private sector.  3 semester hours.

MGT 305  **Introduction to Sports Culture in America.** This course introduces students to the business side of sports in America. It provides an overview for the opportunities in the sports and leisure industry. The course emphasizes critical thinking skills. Topics covered include ethics, social concerns and the economic impact of sports and leisure upon America.  3 semester hours.

MGT 320  **Organizational Behavior.** Overview of organizational structures and group dynamics. Examines job satisfaction, motivation, performance evaluation, decision-making and goal setting. Each semester.  3 semester hours.

MGT 323  **Group Processes.** Provides the basic theory necessary to understand the components of the group process. The course gives the opportunity to participate in functioning groups for decision making and to practice newly developed skills in class groups.  3 semester hours.

MGT 330  **Human Resource Management.** Relationship of internal and external labor market concepts to organinizational manpower planning.  3 semester hours.

MGT 331  **Labor and Industrial Relations.** Analysis of the structure and behavior of labor and business enterprises and implications of this behavior for resource allocation and individual welfare. Prerequisite: ECON 101, ECON 202.  3 semester hours. Writing Intensive Course.

MGT 333  **Operations Management.** A study of theory, principles and computational procedures as applied to such areas as strategic planning, forecasting, capacity planning, productivity and quality control.  3 semester hours.

MGT 334  **Training and Development.** This course covers corporate training and development including assessment, training design, training evaluation, management and executive training. Pre-requisite: MGT 330. Offered fall term.  3 semester hours. Typically offered Fall Term.

MGT 335  **Compensation and Performance Management.** A study of the historical development of compensation theory and its applications to the design and implementation of benefit/reward structures in modern organizations. Pre-requisite: MGT 330. Offered Spring.  3 semester hours. Typically offered Spring Term.

MGT 347  **Project Management.** The art and science of project management as applied to a variety of business and technology settings. Discusses how to initiate, plan, execute and control, and close projects, within budget and on schedule. Includes management of project scope, time, cost, quality, human resources, communications, and risks. A project planning software tool is utilized, usually MS Project. Spring. Prerequisite: Junior or Senior Standing.  3 semester hours. Typically offered Spring Term.
MGT 370  Industrial Organization & Policy. Focuses on empirical studies in patterns of market structure, business behavior, and performance. Applications in the fields of antitrust and regulation are stressed. Prerequisite: ECON 202. 3 semester hours.

MGT 380  Strategic Management. Management capstone course enabling business students to use the disciplines and techniques learned throughout their program of study. Case studies stress the importance of basing management decisions on a strategic view of organizations. Fall and Spring semesters. Prerequisite: senior standing, FINA 300, MGT 300 MKTG 300 3 semester hours. Typically offered Fall and Spring Terms.

MGT 387  Management Capstone. This is the management capstone course enabling students to integrate and use the disciplines and techniques learned throughout the program of study. Case studies are utilized to stress the importance of basing management decisions on a strategic view of organizations. The focus is on the role of management in the development of organizational strategy, on the practice of the decision-making process and in the development of an appropriate organizational structure. Prerequisite: Admission to the Adult BA in Management Program. 3 semester hours.

MGT 389  Senior Seminar. Capstone course for organizational leadership major. Focus on an analysis of the leadership role in complex organizations. Case-based approach will integrate previous knowledge and emphasize use of critical thinking. 3 semester hours.

MGT 391  Topics. Specially designed courses in various business topics to supplement the business curriculum. Prerequisite: Varies based upon the specific topic being explored. 1-3 semester hours. Course Repeatable. Maximum number of units allowed 99.

MGT 395  Independent Study. Provides an opportunity for an advanced student in the major to pursue study in a field of business related interest. Prerequisite: Consent of instructor. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

MGT 397  Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Consent Required.

Marketing

MKTG 230  Fundamentals of Selling. This course provides a comprehensive approach to the fundamentals of selling, focusing on effective strategies throughout the sales cycle, including: identifying customer needs; developing relationships; product presentations and qualifying sales; and closing and servicing a sale. Students apply these concepts through preparation of sales proposals and presentations that sell. 3 semester hours.

MKTG 232  Managing Sales Relationships for Productivity. The course is an introduction to aspects of professional sales relations that affect sales productivity. Participants are introduced to various patterns for analyzing the dynamics of the professional selling process and customer service which determine the dynamics of sales relationships. 3 semester hours.

MKTG 234  Psychology of Sales. This course provides a practical approach to the key component of the sales effort - "the close." Emphasis is given to consumer objectives, demonstration strategies, and closing techniques. 3 semester hours.
MKTG 236  Negotiating Skills in Business. This course focuses on the process and practice of effective negotiations in the sales and marketing environment. The impact of negotiating on management and other business practices is also addressed. 3 semester hours.

MKTG 238  Sales Management. This course is designed to prepare prospective sales managers for the challenges they face in corporate sales settings. It deals with the critical impact management has on sales, as well as the effective team-building strategies and leadership skills needed for success in these key positions. 3 semester hours.

MKTG 240  Business Ethics in Sales. This course deals with the ethical implications of management decision-making in society. It places emphasis on the ethical impact of contemporary social, political and economic issues. 3 semester hours.

MKTG 291  Topics. Specially designed courses in various business topics to supplement the business curriculum. Prerequisite: Varies based upon the specific topic being explored. 3 semester hours.

MKTG 297  Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 12.

MKTG 300  Marketing. An investigation of the basic principles of marketing, with an emphasis on the practical application of those principles to formulate marketing plans that will deliver value to customers and meet the goals of the organization. Fall and Spring semesters. Prerequisite: Sophomore standing 3 semester hours. Typically offered Fall and Spring Terms.

MKTG 305  Sports Marketing. A case study approach will be used to explore and analyze situations that pertain to sports marketing. Spring. Pre-Requisite: Mktg 300 3 semester hours. Typically offered Spring Term.

MKTG 310  Consumer Behavior. A study of consumers' needs, wants, and behavior in the marketplace as a basis for the formulation of marketing strategy. Spring semester. Prerequisite: Sophomore standing. 3 semester hours. Business Core Elective. Typically offered Spring Term.

MKTG 330  Promotional Strategy. An integrated marketing communications (IMC) approach to the study of the strategies organizations use to promote their products and services. The course goes beyond the traditional study of advertising, sales promotion, personal selling, direct marketing, and public relations to show how all four elements of the marketing mix--product, price, promotion, and distribution--must blend together to present a unified message to customers. Fall semester. Prerequisite: MKTG 300 3 semester hours. Typically offered Fall Term.

MKTG 331  Internet Marketing Communications. Internet marketing is reshaping the way businesses and consumers interact with each other. This course studies how the Internet as a communication channel can be valuable to marketing decision makers eager to understand and utilize Internet technology to grow their businesses. Examining the Internet and its evolution from a research tool to a marketing communications medium, this course shows how the Internet offers an array of one-to-one, real-time, personalized marketing communications. Through various exercises and projects, students will explore how the Internet affords decision makers the opportunity to customize their marketing approaches to meet individual customers' needs and to make the Internet an effective part of an overall Integrated Marketing Communications Strategy. Pre-requisite: MKTG 300 3 semester hours.
MKTG 332 Web 2.0 Tools in Business. Consumers have embraced Web 2.0 technologies including, for example, social networking applications—Facebook, LinkedIn, Twitter; YouTube; wikis; blogs; tags; mashups; and virtual worlds. How are organizations using these applications? How might organizations use these applications? Specific topics will include an overview of Web 2.0 technologies, how these tools may be leveraged in an organization, how to align these tools with business goals, how to foster collaboration, and how to ensure security. 1 semester hour. Typically offered Spring Term.

MKTG 333 Personal Selling and Sales Management. This course examines the role personal selling plays in an organization's overall integrated marketing communications program. Students will explore how personal selling works with other elements of the promotional mix (advertising, publicity, sales promotion) to create a uniformed, integrated marketing message. In addition to gaining knowledge of traditional personal selling practices and techniques, students will learn how the Internet is increasingly factoring into an organization's personal selling strategy. Pre-requisite: MKTG 300 3 semester hours.

MKTG 350 International Marketing. Studies strategic issues in marketing products and services across national borders. Examines cultural, legal, ethical, and economic constraints. Prerequisite: INTB 300 or MKTG 300. 3 semester hours.

MKTG 351 Global Development Issues. A study of the meaning, measurement and historical context of economic development and the issues underlying the vast differences in development between nations of the world. Topics covered include population, agriculture, industry, trade and foreign debt. (Periodically) 3 semester hours. Typically offered Periodically.

MKTG 360 Marketing Research. This course presents the principles of marketing research primarily from the perspective of the users of that research, with a focus on the practical and applied aspects of the subject. Emphasis will be placed on how marketing researchers apply the various concepts and techniques, as well as how business decision makers implement the findings to improve marketing practices. Topics covered will include research design, sampling techniques, questionnaire design, measurement and scaling, data collection and analysis, and report preparation. Fall semester. Prerequisite: MKTG 300, MGT 150, Junior standing 3 semester hours. Typically offered Fall Term.

MKTG 380 Marketing Strategy. A comprehensive study of major topics in strategic marketing, the components of a marketing plan, and financial analysis for marketing management. Case studies are used as the approach for utilizing marketing concepts and practices to analyze marketing problems in a wide variety of industry settings and to develop marketing strategies based on those analyses. Spring semester. Prerequisite: MKTG 300, Senior standing 3 semester hours. Typically offered Spring Term.

MKTG 391 Topics. Specially designed courses in various business topics to supplement the business curriculum. Prerequisite: Varies based upon the specific topic being explored. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

MKTG 395 Independent Study. Provides an opportunity for an advanced student in the major to pursue study in a field of business related interest. Prerequisite: Consent of instructor. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

MKTG 397 Internship. Practical experiences in business related fields under the supervision of the program coordinator. Prerequisite: Consent of internship faculty coordinator. 2-6 semester hours. Consent Required.

Mathematics
MATH 95 **Intermediate Algebra.** Topics include real numbers, linear equations, exponent, polynomials, rational expressions, radicals, and quadratic equations. Each semester. Prerequisite: Placement exam. 3 semester hours. Typically offered Fall and Spring Terms.

MATH 104 **Advanced Business Mathematics.** This course is designed to provide the student with a good understanding of proper problem-solving techniques; simplifying algebraic expressions; solving first-degree equations; the properties of lines, graphs and functions; modeling and analysis of functions; and solving finance problems. The TI-83 Plus graphing calculator is used throughout the course. Prerequisite: Admission to the Adult Learning Team or Online Program. 3 semester hours.

MATH 105 **Finite Mathematics.** A survey of algebra, functions, graphs, and linear equations as applied to problems in economics and business. Topics include mathematics of finance, linear, polynomial, exponential, and logarithmic functions. Credit will not be granted for both MATH 105 or MATH 110. Each semester. Prerequisite: Placement exam or a “C” or better in MATH 095. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

MATH 108 **Quantitative Reasoning.** Develops conceptual understanding and computational skills in unit analysis, uses of percentages, and dealing with quantities and their magnitudes. Includes formulas of finance for simple interest, compound interest and loan payments; functions and their graphs; linear equations; exponential growth and decay; principles of counting; fundamentals of probability; and estimation and approximation techniques to judge the reasonableness of answers. Also includes representing and analyzing data using statistical tools such as histograms; measures of central tendency; variance and standard deviation; linear regression and scatter plots; normal distributions; and margin of error and confidence intervals. Each Semester. IAI M1 904. Prerequisite: Placement exam or a “C” or better in MATH 095. 3 semester hours. Typically offered Fall and Spring Terms.

MATH 110 **College Algebra.** Topics include equations, inequalities, functions, graphs, polynomial and rational functions, exponential & logarithmic functions, equations, and systems of equations and inequalities. Credit will not be granted for both MATH 105 and MATH 110. Each semester. Prerequisite: Placement exam or a “C” or better in MATH 095. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

MATH 111 **College Trigonometry.** General study of the trigonometric functions and their graphs, trig identities, and equations, inverse trig functions, applications of trigonometry, vectors, polar coordinates, and parametric equations. Each semester. IAI MTM 901. Prerequisite: Placement exam or a “C” or better in MATH 105 or MATH 110. 3 semester hours. Typically offered Fall and Spring Terms.

MATH 112 **Mathematics for Elementary Teachers I.** This course explores the mathematical content of elementary school mathematics from the perspective of future elementary school teachers. Topics include mathematical thinking, problem solving, sets, representations of functions, numeration, standard and non-standard arithmetic algorithms, mental arithmetic and estimation, number theory, integers, fractions and rational numbers, decimals, and real numbers. Graphing calculators and manipulatives are used throughout the course. This course is required for elementary education majors. Fall and Spring. Prerequisite: "C" or better in MATH 095 or placement exam. Natural Sciences core elective. 4 semester hours. Math Comp Sci Core Elect. Typically offered Fall Term.

MATH 115 **Business Calculus.** A survey of mathematical techniques used in the managerial, social and life sciences. Topics include systems of linear equations and matrices, linear programming, differential calculus, and applications of the derivative. Each semester. Prerequisite: "C" or better in MATH 110 or MATH 105, or placement exam. 3 semester hours. Math Comp Sci Core Elect. Typically offered Fall, Spring, and Summer Terms.
MATH 150  Introduction to Statistics.  Basic course in statistical techniques which includes measures of central tendency, probability, sampling, estimation and hypothesis testing. For non-business majors. Each semester. IAI M1 902. Prerequisite: "C" or better in MATH 105 or MATH 110. 3 semester hours. Typically offered Fall and Spring Terms.

MATH 170  Introduction to Calculus I.  An introduction to limits and differentiation. Topics in algebra, functions, and trigonometry will be reviewed as necessary for calculus. Further study includes the chain rule, Newton's approximations, plane analytic geometry, and applications of velocity and marginal cost. The computer algebra system Maple will be employed. Fall. Prerequisite: Placement exam or "C" or better in MATH 111, co-requisite: MATH 171 4 semester hours. Math Comp Sci Core Elect. Typically offered Fall Term.

MATH 171  Introduction to Calculus I Lab.  Selected computer explorations to illustrate and/or investigate the mathematical concepts in MATH 170. Fall. Prerequisite: Placement exam or a "C" or better in MATH 111. Co-registration in MATH 170. 1 semester hour. Math Comp Sci Core Elect. Typically offered Fall Term.

MATH 190  Mathematics Topics.  1-3 semester hours.

MATH 200  Applications of Calculus I.  A continuation of MATH-170. Topics include curve sketching, plane analytic geometry, maxima and minima, related rates, and other applications of the derivative. Study concludes with definite and indefinite integrals, numeric integration, elementary differential equations, parametric functions, and the Fundamental Theorems of Integral Calculus. The computer algebra system Maple will be used to illustrate calculus concepts. Credit will not be granted for both MATH-200 and MATH-210. Spring. Prerequisite: “C” or better in MATH-C170. 4 semester hours. Math Comp Sci Core Elect. Typically offered Spring Term.

MATH 207  Calculus with Analytics I Lab.  Selected computer explorations to illustrate and/or investigate the mathematical concepts in MATH 210. Each semester. Corequisite: Coregistration in MATH 210 or MATH 220. 1 semester hour. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

MATH 208  Biocalculus II Lab.  Selected computer explorations to illustrate and/or investigate the mathematical concepts and biological models in Math 221. Spring. Co-requisite: Co-registration in MATH 221, Biocalculus II. 1 semester hour. Math Comp Sci Core Elect. Typically offered Spring Term.

MATH 210  Calculus with Analytics I.  Topics include differentiation, and antidifferentiation of algebraic, trigonometric and transcendental function, the fundamental theorem of calculus, applied problems on maxima and minima, plane analytic geometry, and simple differential equations. The computer algebra system Maple will be used to illustrate calculus concepts. Credit will not be granted for both MATH 200 and MATH 210. Each semester. IAI M1 900-1; EGR 901; MTH 901. Prerequisite: Placement exam, or "B" or better in MATH 111. Corequisite: MATH 207. 4 semester hours. Math Comp Sci Core Elect. Typically offered Fall, Spring, and Summer Terms.

MATH 211  Calculus with Analytics II.  Topics include applications of the definite integral, methods of integration, sequences and series and numeric integration. The computer algebra system Maple will be used to illustrate calculus concepts. IAI M1 900-2; EGR 902; MTH 902. Each semester. Prerequisite: “C” or better in MATH 200, MATH 205, MATH 210 or MATH 220. 4 semester hours. Math Comp Sci Core Elect. Typically offered Fall, Spring, and Summer Terms.
MATH 212  Calculus with Analytics III. Topics include solid analytic geometry and vectors, partial differentiation, multiple integrals and vector calculus. The computer algebra system Maple will be used to illustrate calculus concepts. Each semester. IAI M1 900-3; EGR 903; MTH 903. Prerequisite: “C” or better in MATH 206, MATH 211 or MATH 221. 4 semester hours. Math Comp Sci Core Elect. Typically offered Fall and Spring Terms.

MATH 220  Biocalculus I. This is the first course in a two-semester sequence in calculus with biological applications. There is a strong emphasis on biological models using real biological data. Topics include semi-log and log-log plots, sequences, basic difference equations, discrete time models, limits, continuity, differentiation and antidifferentiation of algebraic, trigonometric, and transcendental functions, applied problems on maxima and minima, equilibria and stability, basic differential equations, and the fundamental theorem of calculus. The course uses the computer algebra system Derive, Excel, and modeling software to explore calculus concepts and biological models. Fall. Prerequisite: Placement exam or "B" or better in MATH 111 and co-registration in MATH 207. 4 semester hours. Math Comp Sci Core Elect. Typically offered Fall Term.

MATH 221  Biocalculus II. This is the second course in a two-semester sequence in calculus with biological applications. There is a strong emphasis on biological models and examples using real biological data. Topics include applications of the definite integral, methods of integration, differential equations, systems of linear equations, matrices, eigenvalues and eigenvectors, analytic geometry, functions of several variables, partial derivatives, differentiability, tangent planes and linearization, systems of difference equations, systems of linear and nonlinear differential equations, equilibria and stability, and an introduction to probability. Applications may include allometric growth, age-structured population matrix models, epidemic models, competition models, host-parasitoid models, and models for neuron activity. The course uses various computer software packages to explore calculus concepts and biological models. Spring. Prerequisite: MATH 200, MATH 205, MATH 210, or MATH 220 or Placement exam. Co-requisite: Co-registration in MATH 208, Biocalculus II LAB. 3 semester hours. Typically offered Spring Term.

MATH 222  Mathematics for Elementary Teachers II. This course is a continuation of MATH 112. This course explores additional mathematical content of elementary school mathematics from the perspective of future elementary school teachers. Topics include proportional reasoning, percents, basic concepts of geometry, two- and three-dimensional geometric figures, transformational geometry, coordinate geometry, symmetry, tessellations, similarity, and direct and indirect measurement. Graphing calculators, manipulatives, and, dynamic geometry software are used throughout the course. This course is required for elementary education majors. Spring. MATH 112 and MATH 222 together satisfy IAI M1 903. Prerequisite: "C" or better in MATH 112. 4 semester hours. Math Comp Sci Core Elect. Typically offered Spring Term.

MATH 240  Discrete Mathematics. Basic concepts of finite and discrete algebraic structures, with emphasis on applications in computer science. Sets, relations, and functions, boolean algebra, computer arithmetic, combinatorics, matrix algebra, directed and undirected graphs, and methods of proof. Each semester. IAI M1 905; CS 915. Prerequisite: "C" or better in MATH 115 or placement or credit in MATH 200, MATH 210 or MATH 220. 4 semester hours. Typically offered Fall and Spring Terms.

MATH 260  Differential Equations. Includes an introduction to 1st and 2nd order ordinary differential equations with an emphasis on linear equations and techniques to solve them, applied problems in various fields, the Laplace transform, a brief introduction to chaos theory, systems of 1st order linear equations and power series solutions 2nd order linear ODEs. Spring. IAI EGR 904; MTH 912. Prerequisite: Credit or co-registration in MATH 212. 4 semester hours. Writing Intensive Course. Typically offered Spring Term.
MATH 280  Introduction to Proofs. An introduction to methods of formal mathematical proof, with emphasis on improving the student’s ability to both read and write such proofs. Topics include logic, set theory, relations, functions, induction and cardinality. Course serves as a transition from beginning mathematics courses to the higher level courses. Periodically. Prerequisite: "C" or better in MATH 211. 3 semester hours. Typically offered Periodically.

MATH 300  Linear Algebra. Topics include matrix algebra, theory of determinants, introduction to vector spaces, linear independence and span, and properties of linear transformations on finite dimensional vector spaces. Spring. IAI MTH 911. Pre-requisite: "C" or better in MATH 212 or MATH 240. 3 semester hours. Typically offered Spring Term.

MATH 310  Modern Geometry. Euclidean and non-Euclidean geometries, geodesics, triangle congruence theorems, area and holonomy, parallelism, symmetry, and isometries. Spring, even years. Prerequisite: "C" or better in MATH 211. 3 semester hours. Writing Intensive Course. Typically offered Spring Term, Even Years.

MATH 312  Mathematics for Middle and Secondary Teachers. Topics include analyses of alternate definitions, languages, and approaches to mathematical ideas; extensions and generalizations of familiar theorems; discussions of the history of mathematics and historical contexts in which concepts arose; applications of mathematics in various settings; analyses of common problems of high school mathematics from a deeper mathematical level; demonstrations of alternate ways of approaching problems, including ways with and without calculator and use of technology; connections between ideas that may have been studied separately in different courses; and relationships of ideas studied in school to ideas students may encounter in later study. Fall, odd years. Prerequisite: “C” or better in MATH 212 and MATH 240. 3 semester hours. Typically offered Fall Term, Odd Years.

MATH 331  Abstract Algebra I. Groups and elementary theory of groups: cyclic groups, permutation groups, homomorphism, isomorphism, cosets and Lagrange's theorem, factor groups, Homomorphism theorem, and an intro to other algebraic structures such as rings, domains and fields. Fall, odd years. Prerequisite: "C" or better in MATH 300. 3 semester hours. Typically offered Fall Term, Odd Years.

MATH 332  Abstract Algebra II. Rings: definition and properties, quotient rings and ideals, and homomorphisms of rings. Polynomial rings, integral domains, and fields. Sylow Theory and group actions, other algebraic structures including algebras, group rings, and vector spaces. Spring, even years. Prerequisite: "C" or better in MATH-331. 3 semester hours. Typically offered Spring Term, Even Years.

MATH 341  Real Analysis I. Topological properties of Euclidean spaces, limits of sequences and functions and continuity and differentiability for functions of one variable. Fall, even years. Prerequisite: "C" or better in MATH 212, and in MATH 240 or MATH 300. 3 semester hours. Typically offered Fall Term, Even Years.

MATH 342  Real Analysis II. Integrability, sequences of functions and infinite series. Spring, odd years. Prerequisite: "C" or better in MATH 341. 3 semester hours. Typically offered Spring Term, Odd Years.

MATH 350  Complex Variables. Complex numbers and their geometric representation, analytic functions, elementary functions, transformations, complex integration, Taylor and Laurent series, and the calculus of residues, conformal mapping, and applications to hyperbolic geometry. Fall, odd years. Prerequisite: "C" or better in MATH 212. 3 semester hours. Typically offered Fall Term, Odd Years.
MATH 361 Fourier Analysis & Boundary Value Problems. Fourier series; Fourier Integral and Fourier Integral, Sturm-Liouville Theory; various techniques to solve partial differential equations; heat equation, wave equation and potential equation in Cartesian, polar, and cylindrical coordinates; and Bessel functions and their applications. Fall, even years. Prerequisite: "C" or better in MATH 260. 3 semester hours. Typically offered Fall Term, Even Years.

MATH 365 Vector Analysis. Vector algebra; vector integration and differentiation; the del operator; the gradient, divergence and curl; line and surface integrals; the main integral theorems of vector analysis - Stokes' Thm., Green's Thm. and Divergence Thm.; tensor notation; and curvilinear coordinates. Periodically. Prerequisite: "C" or better in MATH-212. 3 semester hours. Typically offered Periodically.

MATH 370 Theory of Interest. Topics include measurement of interest, various types of annuities, yield rates, amortization schedules, sinking funds, bonds and securities. Spring, odd years. Prerequisite: "C" or better in MATH 211. 3 semester hours. Typically offered Spring Term, Odd Years.

MATH 371 Probability and Statistics I. Discrete and continuous probability distributions, moments and mathematical expectation, moment generating functions, conditional probability and expectation, and multivariate distributions, and convolutions. Fall, even years. Prerequisite: Credit or co-registration in MATH 212. 3 semester hours. Typically offered Fall Term, Even Years.

MATH 373 Probability and Statistics II. Sampling distributions, estimation, decision theory, tests of hypotheses, least squares and regression, and correlation and analysis of variance. Spring, odd years. Prerequisite: "C" or better in MATH 371 and MATH 212. 3 semester hours. Writing Intensive Course. Typically offered Spring Term, Odd Years.

MATH 380 Numerical Analysis. Numerical methods for isolating roots, solving systems of linear equations, interpolation, and evaluating derivatives and definite integrals. Periodically. Prerequisite: "C" or better in MATH 211 and programming experience. 3 semester hours. Typically offered Periodically.

MATH 381 Numerical Analysis Practicum. A hands-on experience with issues in numerical analysis. Topics may include the application of parallel processing capabilities to numerical problems, extend accuracy computations, computational aspects of large physical problem modeling, or experimental relationships between accuracy and complexity in numerical computations. Periodically. Prerequisite: MATH 380 or co-registration in MATH 380. 1 semester hour. Typically offered Periodically.

MATH 385 Introduction to Modern Cryptology. Cryptology concerns communicating in the presence of an adversary, with goals like preservation of privacy and integrity of communicated data. Topics include rigorous mathematical description of various symmetric (i.e., private key) and symmetric (i.e., public key) cryptographic methods including substitution ciphers, block ciphers, RSA, the discrete logarithm problem, and other applications, with emphasis on "provable security". Spring, even years. Pre-requisite "C" or better in MATH 212 or MATH 240. 3 semester hours. Typically offered Spring Term, Even Years.

MATH 390 Selected Topics. Lectures on miscellaneous topics with which the student has not become acquainted in formal course work. May be an extension of, or a supplement to, material previously encountered, or material from a completely new area. Prerequisite: Consent of instructor. 3 semester hours. Consent Required.

MATH 395 Independent Study. Designed to encourage superior students to continue the study of mathematics beyond the scope of undergraduate course offerings, through guided independent study. Prerequisite: Consent of instructor. 1-3 semester hours. Consent Required.
MATH 397  Mathematical Research I.  Original research in mathematics or mathematics education conducted under the supervision of a faculty member. Periodically. 1-3 semester hours. Typically offered Periodically. Consent Required.

MATH 398  Mathematical Research II.  Continuation of MATH 397. Periodically. 1-3 semester hours. Typically offered Periodically. Consent Required.

MATH 399  Internship.  Practical experience in mathematics or related career fields under the supervision of the Mathematics faculty. 3-6 semester hours. Consent Required.

Medical Humanities

MDHM 200  Introduction to Medical Humanities.  Provides an introduction to the interdisciplinary fields of study that characterize the discipline, as well as to the Benedictine major program. Required for all Medical Humanities majors. 3 semester hours.

Military Science

MSCI 101  Foundations of Officership.  This course is an introduction to fundamental components of service as an officer in the United States Army. These initial lessons form the building blocks of progressive lessons in values, fitness, leadership, and officership. This course also addresses "life skills" including fitness, communications theory and practice (written and oral), interpersonal relationships, and the ethics of Christian service. Emphasis on "hands-on" learning also includes blocks of instruction map reading, orienteering, marksmanship, and rappelling as well as weekly leadership laboratories, one weekend field trip, and physical training. Upon completion of this semester, the cadets should be prepared to receive more complex leadership instruction. 2 semester hours.

MSCI 102  Basic Leadership.  Builds upon the fundamentals introduced in the previous semester by focusing on leadership theory and decision making. "Life skills" lessons in this semester include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion of this semester, cadets should be prepared to advance to more complex leadership instruction concerning the dynamics of organizations. Additionally, they will be increasingly required to demonstrate knowledge of leadership fundamentals and communications (written and oral). Again, "hands-on" learning also includes blocks of instruction on map reading, orienteering, marksmanship, and rappelling as well as weekly leadership laboratories, one weekend field trip, and physical training. Upon completion of this semester, the cadets should be prepared to receive more complex leadership instruction. 2 semester hours.

MSCI 123  Military Science Leadership Lab.  Practical application of military skills taught in MSCI basic and advanced courses. Hands on training in basic soldiers skills, squad and platoon tactics, weapons, communications, and organizational leadership.

MSCI 201  Individual Leadership Studies.  This course builds on the fundamentals introduced in the first year curriculum. Using practical exercise, cadets must increasingly apply communications and leadership skills to solve increasingly complex problems. The course concludes with a major leadership and problem solving case study which draws on virtually all of the classroom instruction received in the first three semesters of the Basic Course. The course also includes one weekend field trip, weekly leadership laboratories, and physical training. Upon completion of this semester, cadets should be well grounded in the fundamental principals of leadership, and be prepared to intensify the practical application of their studies during the Advanced Course. 2 semester hours. Consent Required.
MSCI  202  Leadership and Teamwork. Basic Course capstone course focuses principally on officership, providing an extensive examination of the unique purpose, roles, and obligations of commissioned officers. It includes a detailed look at the origin of our institutional values and their practical application in decision making and leadership. Introduces fundamentals and principles of small unit tactics. Upon completion of this semester, cadets should possess a fundamental understanding of both leadership and officership, demonstrate the ability to apply this understanding in real world situations, and be excited about the aspect of shouldering the responsibility of a commissioned officer in the United States Army. Includes one weekend field trip, weekly leadership laboratories, and physical training. 2 semester hours. Consent Required.

MSCI  225  Leader's Training Course (LTC). An alternative to the Basic Course above, LTC offers a possibility for students who have not considered ROTC until late in their sophomore year an opportunity for a scholarship and entry into the Advanced Course. The sole purpose for attending LTC is to qualify for the Advanced Course. Students contract prior to attending, and, therefore, must be American citizens to attend. LTC is a 28-day summer training course conducted at Fort Knox, Kentucky, designed to teach the fundamentals of soldiering and leadership and to enhance personal confidence using practical, hands-on exercises including: land navigation, rifle marksmanship, first aid, individual and unit tactics, obstacle courses, and rappelling. Military pay approximately $750. (optional 4 hours credit incurs special tuition charge.) 4 semester hours. Consent Required.

MSCI  301  Leadership and Problem Solving. Focus of instruction is on leadership competencies using small unit operations as the primary mode of instruction. Cadets assume leadership positions within the Rolling Thunder Battalion, and actually apply the theory they have learned in the basic Course by planning and executing small unit training. The semester begins with instruction in the Leadership Development Process (LDP) used throughout the academic year and at NALC to assess and develop leadership. Cadets will focus on troop leading procedures, motivational theory, small unit training, operations orders, and risk assessment. Course includes weekly leadership lab, one weekend field trip, and physical training. 4 semester hours. Consent Required.

MSCI  302  Leadership and Ethics. A continuation of MSCI 331 emphasizing doctrinal leadership and tactical operations at the small unit level. It includes opportunities to plan and conduct individual and collective skill training for offensive operations to gain leadership and tactical experience. This critical semester synthesizes the various components of training, leadership and team building taught over the last three years, and prepares cadets for their summer experience at NALC. Course includes weekly leadership lab, one weekend field trip, and physical training. 4 semester hours. Consent Required.

MSCI  303  Leadership and Management. Focusing on leadership, management, and ethics, MSCI 401 begins the final transition from cadet to lieutenant. The course focuses cadets, early in the year, on attaining apprentice level knowledge and proficiency in several critical areas they will need to operate effectively as Army officers including coordinating activities with staffs, counseling theory and practice within the “Army Context,” training management, and ethics. Cadets will continue to sharpen these skills as they perform their roles as cadet officers in the Rolling Thunder Battalion and after commissioning. At the end of this semester cadets should possess the fundamental skills, attributes, and abilities to operate as competent leaders in the cadet battalion and confidently communicate to subordinate cadets their preparedness to shoulder the responsibilities entrusted to them. Course includes weekly leadership lab, one weekend field trip, and physical training. 4 semester hours. Consent Required.
MSCI 304  Officership. A continuation of MSCI 303, MSCI 304 completes the transition from cadet to lieutenant. As a follow-on to the Ethics instruction in MS 303, the course starts with a foundation in the legal aspects of decision making and leadership. The next modules reinforce previous instruction on the organization of the Army, introduce how we organize for operations from the tactical to strategic level, and introduce administrative and logistical management issues that focus on the fundamentals of soldier and unit level support. The final module that introduces new information focuses on the often confusing process of changing duty stations and reporting to a new unit. Upon completion of this semester the cadets will be prepared to shoulder the responsibility of being a commissioned officer in the United States Army. Course includes weekly leadership lab, one weekend field trip, and physical training. 4 semester hours.  Consent Required.

MSCI 335  National Advanced Leadership Camp (NALC). Approximately 3,500 cadets nationwide will attend NALC at Fort Lewis, Washington each year. An Advanced Course requirement, NALC provides an opportunity to live and work with other cadets from around the country for 35 days. NALC is a performance based environment in which cadets can exercise their leadership skills in a variety of field and garrison activities, and cadre can assess leadership potential. Military pay approximately $1,100. Prerequisite: MSCI 302. (Optional four hours credit incurs special tuition charge.) 4 semester hours.  Consent Required.

MSCI 343  American Military History. Taught at Wheaton College by the Professor of Military Science for a $25 cross enrollment fee. Introduces cadets to American military history using principles of warfare, threads of continuity, battle analysis, and oral biographies. This course is required for commissioning. 2 semester hours.  Consent Required.

MSCI 401  Leadership and Management. Focusing on leadership, management, and ethics, MSCI 401 begins the final transition from cadet to lieutenant. The course focuses cadets, early in the year, on attaining apprentice level knowledge and proficiency in several critical areas they will need to operate effectively as Army officers including coordinating activities with staffs, counseling theory and practice within the "Army Context," training management, and ethics. Cadets will continue to sharpen these skills as they perform their roles as cadet officers in the Rolling Thunder Battalion and after commissioning. At the end of this semester cadets should possess the fundamental skills, attributes, and abilities to operate as competent leaders in the cadet battalion and confidently communicate to subordinate cadets their preparedness to shoulder the responsibilities entrusted to them. Course includes weekly leadership lab, one weekend field trip, and physical training. 4 semester hours.  Consent Required.

MSCI 402  Officership. A continuation of MSCI 303, MSCI 304 completes the transition from cadet to lieutenant. As a follow-on to the Ethics instruction in MS 303, the course starts with a foundation in the legal aspects of decision making and leadership. The next modules reinforce previous instruction on the organization of the Army, introduce how we organize for operations from the tactical to strategic level, and introduce administrative and logistical management issues that focus on the fundamentals of soldier and unit level support. The final module that introduces new information focuses on the often confusing process of changing duty stations and reporting to a new unit. Upon completion of this semester the cadets will be prepared to shoulder the responsibility of being a commissioned officer in the United States Army. Course includes weekly leadership lab, one weekend field trip, and physical training. 4 semester hours.  Consent Required.

MSCI 403  American Military History. Taught at Wheaton College by the Professor of Military Science for a $25 cross enrollment fee. Introduces cadets to American military history using principles of warfare, threads of continuity, battle analysis, and oral biographies. This course is required for commissioning. 2 semester hours.  Consent Required.

MSCI 495  Independent Study. A self paced study at the advanced level focusing on Military Science. 1-4 semester hours.  Course Repeatable. Maximum number of units allowed 4.
MUSI 100  Introduction to Music Theory, Composition and Performance. A survey course intended to develop the understanding of musical elements and form with the goal of preparing the student for the study of applied music. Basic skills in theory, composition, and performance will be taught. Awareness and understanding of how music as a subject relates to other arts and sciences will also be developed. 3 semester hours. Fine Arts/Music Core Elective 3 semester hours. Music Core Elective.

MUSI 101  Music Theory I. Reviews fundamentals of music theory. Examines basic theoretical elements in music including major and minor scales, chord progressions, and form as they apply to musical specific examples. Co-registration MUSI 112 and MUSI 194 required for music majors. Co-registration MUSI 112 required for music minors. Fall. 3 semester hours. 3 semester hours. Music Core Elective. Typically offered Fall Term. Consent Required.

MUSI 102  Music Theory II. Works with basic theoretical elements applying them to harmonization and simple modulations. Introduces simple forms including binary and ternary. Co-registration with MUSI 113 and MUSI 195 are required. Spring. 3 semester hours. Typically offered Spring Term.

MUSI 104  Music Appreciation. This course explores the history of Western Classical Music by focusing on each of its eras. It also offers access to various ways to listen to music and how to take full advantage of concert attendance. Provides detailed explanations and sound demonstrations of the basic musical elements and performing media. Periodically. IAI F1 900. 3 semester hours. Music Core Elective. Typically offered Periodically.

MUSI 105  Music Appreciation: Medieval to Baroque. Eight week modular course - Student cannot receive credit for MUSI 105 or 106 if MUSI 104 has been completed. Fine Arts/Music Core Elective 2 semester hours. Music Core Elective.

MUSI 106  Music Appreciation: Classical to Contemporary. Eight week modular course - Student cannot receive credit for MUSI 105 or 106 if MUSI 104 has been completed. Fine Arts/Music Core Elective 2 semester hours. Music Core Elective.

MUSI 112  Aural Skills I. Begin training of musical skills relating to pitch and rhythmic recall and recognition. Students will develop the ability to sing melodies in pitch and rhythm. Progression through Aural Skill courses dependent on course sequence or proficiency testing. Fall. Co-registration with MUSI 101 and MUSI 194. 1 semester hour. Music Core Elective. Typically offered Fall Term.

MUSI 113  Aural Skills II. Second course in training of musical skills relating to pitch and rhythmic recall and recognition. Students will develop the ability to sing melodies in pitch and rhythm. Progression through Aural Skill courses dependent on course sequence or proficiency testing. Prerequisite: MUSI 101/112 or proficiency. Co-registration with MUSI 102 required. 1 semester hour.

MUSI 121  Concert Band. A performing ensemble dedicated to the study and performance of the wind band repertoire. Standard and new compositions will be performed in concerts each semester. May be repeated. IAI MUS 908. Prerequisite: By permission of instructor. Music Core Elective. Typically offered Fall and Spring Terms. Course Repeatable. Maximum number of units allowed 14.

MUSI 122  Concert Choir. A performing ensemble utilizing practical work and study of choral literature of all periods of music in concerts each semester. May be repeated. IAI MUS 908. Prerequisite: By permission of instructor. Music Core Elective. Typically offered Fall and Spring Terms. Course Repeatable. Maximum number of units allowed 14.
MUSI 125  Chamber Music Ensemble. Chamber Music Ensemble: Performing ensemble dedicated to the mastery of performance technique through intimate ensemble experiences. Heightened teamwork, communication, and music reading skills are stressed. A closer association with the audience is developed providing the music student, vocal or instrumental the ability to have and increased understanding of the impact their music making has on the community. Co-registration in 200 or 300 level applied music. 1 semester hour. Music Core Elective. Course Repeatable. Maximum number of units allowed 14.

MUSI 126  Percussion Ensemble. A performing ensemble consisting of mixed percussion instruments. Performances each semester. May be repeated. IAI MUS 908. Prerequisite: Consent of instructor. Typically offered Fall and Spring Terms. Consent Required. Course Repeatable. Maximum number of units allowed 1.


MUSI 129  Chamber Orchestra. Music Core Elective.

MUSI 130  Woodwind Methods. Study of the technical and artistic aspects of playing instruments in the woodwind family with emphasis on the repertoire used in teaching applied lessons in the elementary, junior high, and high schools levels. Students are required to perform basic pieces to show their competency in each of the instruments. 2 semester hours.

MUSI 131  Brass and Percussion Methods. Study of the technical and artistic aspects of playing instruments in the Brass and Percussion families with emphasis on the repertoire used in teaching applied lessons in the elementary, junior high, and high schools levels. Students are required to perform basic pieces to show their competency in each of the instruments. 2 semester hours.

MUSI 132  String Methods. Study of the technical and artistic aspects of playing instruments in the string family with emphasis on the repertoire used in teaching applied lessons in the elementary, junior high, and high schools levels. Students are required to perform basic pieces to show their competency in each of the instruments. 2 semester hours.

MUSI 133  Vocal Methods. Study of the technical and artistic aspects of playing instruments in the voice family with emphasis on the repertoire used in teaching applied lessons in the elementary, junior high and high schools levels. Students are required to perform basic pieces to show their competency in each of the instruments. 2 semester hours.

MUSI 140  Applied Instrumental: Non-Keyboard. All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing. IAI MUS 909. 1 semester hour. Music Core Elective. Course Repeatable. Maximum number of units allowed 4.
MUSI 144  Applied Keyboard.  All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing. IAI MUS 909.  1 semester hour. Music Core Elective.  Course Repeatable. Maximum number of units allowed 4.

MUSI 148  Applied Voice.  All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing. IAI MUS 909.  1 semester hour. Music Core Elective.  Course Repeatable. Maximum number of units allowed 4.

MUSI 190  Class Instruction in Voice.  For the student who wants to learn to sing but has never studied voice or cannot read music. May be repeated. Periodically  2 semester hours. Music Core Elective. Typically offered Periodically.

MUSI 191  Class Instruction in Voice II.  For the student who wants to continue to learn to sing but has never studied voice other than MUSI 190.  2 semester hours.

MUSI 194  Keyboard Skills.  Class instruction in Piano: For the beginning piano student who prefers to learn in a group setting. Can be repeated.  2 semester hours. Music Core Elective.

MUSI 195  Class Instruction in Piano II.  To be taken after the completion of MUSI 194. Prerequisite: MUSI 194  2 semester hours.

MUSI 196  Class Instruction in Voice.  Instruction in Voice: For the beginning vocal student who prefers to learn in a group setting  2 semester hours.

MUSI 198  Class Instruction in Guitar.  For the beginning guitar student who prefers to learn in a group setting.  2 semester hours. Music Core Elective.

MUSI 199  Class Instruction in Guitar II.  For the beginning student who wants to continue to learn to play the acoustic guitar.  Student must supply the instrument. Prerequisite: MUSI 198  2 semester hours.

MUSI 201  Theory III.  An advanced theory course designed to cover chordal structures, formal analyses, development of aural skills, inversions, non-diatonic harmony, and sight-singing. Fall. IAI MUS 903. Prerequisite: MUSI 102. Co-registration with MUSI 212 required.  3 semester hours. Typically offered Fall Term.

MUSI 202  Music Theory IV.  A continuation of MUSI-201. with emphasis on twentieth century procedures and theoretical concepts. Spring. IAI MUS 904. Co-registration with MUSI 213 required.  3 semester hours. Typically offered Spring Term.
MUSI 204  **Music Literature.**  The study and exploration of the Western Music composed during the Baroque, Classical, Romantic, and Contemporary periods. This music literature (i.e. musical scores) will be examined according to each significant genre, utilizing the composers from these periods as a frame of reference and discussion. Significant non-musical areas that influenced changes (such as religion, politics, technology, and historical events) will also be investigated. Emphasis will be placed upon developing listening skills, score analysis and the ability to generalize music listening activities to music not previously encountered from these periods. Periodically. IAI MUS 905. 3 semester hours. Music Core Elective. Typically offered Periodically.

MUSI 205  **Music History I.**  Studies the origin and development of music from the ancient times through the Medieval, Renaissance, and Baroque periods. Special emphasis is placed on the crucial events, individuals, and genres that were developed and produced during this time. Analyzes and focuses on the cultural contributions and pedagogical implications of the significant epochs of this era. Fall. IAI F1 902. Prerequisite: MUSI 102. 3 semester hours. Music Core Elective. Typically offered Fall Term.

MUSI 206  **Music History II.**  Studies the origin and development of music from the Classical through the modern periods. Special emphasis is placed on the crucial events, individuals, and genres that were developed and produced during this time. Analyzes and focuses on the cultural contributions and pedagogical implications of the significant epochs of this era. IAI F1 902. Spring. Prerequisite: MUSI 102, MUSI 205. 3 semester hours. Typically offered Spring Term.

MUSI 207  **World Music.**  An investigation of the diverse cultures as represented by their music. Native instruments, production strategies, and theoretical analyses provide the student with a foundation to better understand the role music plays both in these cultures as well as our own. The course focuses on non-western music. IAI F1 903N. Fall. 3 semester hours. Music Core Elective. Typically offered Fall Term.

MUSI 208  **Women in Music.**  This course examines the role of women in Western music which has historically been de-emphasized or even ignored until recently. The full extent of musical endeavors among women will be investigated along with some of the factors which accounted for the treatment many of these important composers and performers have received in the past. The primary focus will be directed toward Western art music, although contemporary and popular examples will also be presented. Spring. 3 semester hours. Music Core Elective. Typically offered Spring Term.

MUSI 209  **The Psalms.**  A historical study of the Psalms that examines their literary form-through music from the Biblical times to the present and exegeses. Their relevancy and prayerful application in our daily lives are examined. 3 semester hours.

MUSI 210  **Jazz History and Appreciation.**  Jazz is America's original art form that reflects the cultural diversity that gave rise to it. African, Caribbean, European and Brazilian influences upon jazz as well as the impact of jazz on other forms of music will be discussed. The class will focus upon its historical development from pre Civil War through the 20th century, reflecting upon both its sacred and secular manifestations. The basic elements of music that distinguish jazz from other musical genres will be explored. The course seeks to cultivate an appreciation of the major figures within jazz history (such as Armstrong, Parker, Ellington, Monk, Davis and Coltrane) and their stylistic innovations as well as their contributions to American culture. 2 semester hours. Music Core Elective.

MUSI 211  **Rock History and Appreciation.**  This course explores the formative influences that gave rise to rock and pop music. It identifies its major figures, innovators and their contributions, as well the various styles that have developed in its history. The impact of social trends on rock music and the influence of rock music on society both are explored, as well as the role that technology has played in rock's evolution. Finally, other forms of music that have assimilated elements of rock music are identified and examined. 2 semester hours. Music Core Elective.
MUSI 212  Aural Skills III. Third course in training of musical skills relating to pitch and rhythmic recognition. Students will develop the ability to sing melodies in pitch and rhythm. Progression through Aural Skill courses dependent on proficiency testing. Prerequisite: MUSI 101/112 and 102/113 or proficiency. Co-registration with MUSI 201 recommended. Fall 1 semester hour. Typically offered Fall Term.

MUSI 213  Aural Skill IV. Fourth course in training of musical skills relating to pitch and rhythmic recognition. Students will develop the ability to sing melodies in pitch and rhythm. Progression through Aural Skill courses dependent on proficiency testing. Spring. Prerequisites: MUSI 101/112, 102/113, and 201/212 or proficiency testing. Co-registration with MUSI 202 required. 1 semester hour.

MUSI 217  Vocal Diction. An advanced course in the study of English, Italian, Latin, German and French diction. The proper formation of vowel sounds, rules to follow in singing situations, and the International Phonetic Alphabet will be emphasized. This course will require research skills and include practicum experiences. Fall even. Prerequisite: Co-registration with MUSI-348. Applied voice or consent of instructor. 3 semester hours. Typically offered Fall Term, Even Years.

MUSI 218  Music and the Mind. This course combines popular and academic sources in an overview of writers, thinkers and researchers and their viewpoints regarding what it means to be musical. Special focus will be given to how people think and act musically. Offered Fall, odd years only. 3 semester hours. Typically offered Fall Term, Odd Years.

MUSI 240  Applied Instrumental: Non-Keyboard. All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing. IAI MUS 909. 2 semester hours. Music Core Elective. Consent Required. Course Repeatable. Maximum number of units allowed 8.

MUSI 241  Junior Year Observation Experience. The student will visit a host school to observe and teach short sections of rehearsals, classes, sectionals, write lessons plans to teach a music history or music theory class, teach exceptional children, and teach a culturally diverse classroom. The student will choose two age levels for observation (six weeks of Elementary level classes, six weeks of Junior high classes, and/or six weeks of High school classes). The students will record their experiences in a journal for revision and assessment by a Benedictine University teacher. 48 hours of Observation to be completed. 0 semester hours.

MUSI 242  Junior Year Observation Experience. The student will visit a host school to observe and teach short sections of rehearsals, classes, sectionals, write lessons plans to teach a music history or music theory class, teach exceptional children, and teach a culturally diverse classroom. The student will choose two age levels for observation (six weeks of Elementary level classes, six weeks of Junior high classes, and/or six weeks of High school classes). The students will record their experiences in a journal for revision and assessment by a Benedictine University teacher. 48 hours of Observation to be completed. 0 semester hours.

MUSI 244  Applied Keyboard. All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing. IAI MUS 909. 2 semester hours. Music Core Elective. Course Repeatable. Maximum number of units allowed 8.
MUSI 248  Applied Voice.  All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing. IAI MUS 909.  2 semester hours. Music Core Elective.  Course Repeatable. Maximum number of units allowed 8.

MUSI 250  Junior Recital.  Preparation and presentation of a solo performance program. Weekly mentoring sessions until performance will include practice with the accompanist, discussion of proper performance etiquette and the preparation of program notes. Co-registration with Applied Music at the 200 level and consent of department.  1 semester hour. Music Core Elective.  Consent Required.

MUSI 291  Topics:  Special course focusing on topics related to the needs and interests of the student. Topics to include areas of music literature, theory, and pedagogy. Periodically.  1-3 semester hours.

MUSI 303  Technology for Music Teachers.  This course surveys the standard music technology software and hardware used in music education today. Emphasis will be given to the areas of pedagogy, composition, music theory, and performance.  3 semester hours.

MUSI 313  Music Pedagogy.  An advanced course focusing on the development of music teaching skills. Particular emphasis will be made in accordance to the needs of the students enrolled. Students will learn the principles, techniques and materials necessary for applied music instruction in studio and classroom settings. Current trends and teaching strategies for diverse student abilities and need are examined. Methods for teaching basic skills in music reading, listening and arranging will be presented in the course. Fall, even years. Prerequisite: 300 level applied instruction.  3 semester hours.

MUSI 323  Music Practicum.  This course is designed to give students supervised practical application of previously studied music theory in music and experienced through applied music and ensembles. The areas of music arranging, conducting, and orchestration will be studied with special attention to their practical use in the current music business environment. The use of music technology to prepare assignments will also be a component of the course. Junior Standing. Spring, odd years.  3 semester hours. Typically offered Spring Term, Odd Years.

MUSI 340  Applied Instrumental: Non-Keyboard.  All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing.  2 semester hours. Music Core Elective.  Consent Required. Course Repeatable. Maximum number of units allowed 8.

MUSI 342  Senior Year Observation Experience.  The student will visit a host school to observe and teach extended sections of rehearsals, classes, sectionals, write lessons plans to teach a music history or music theory class, teach exceptional children, and teach a culturally diverse classroom. The student will choose two age levels for observation (six weeks of Elementary level classes, six weeks of Junior high classes, and/or six weeks of High school classes). The students will record their experiences in a journal for revision and assessment by a Benedictine University teacher. 100 hours of observation to be completed.  3 semester hours.
MUSI 344  Applied Keyboard.  All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing.  2 semester hours. Music Core Elective.  Course Repeatable. Maximum number of units allowed 8.

MUSI 348  Applied Voice.  All individual applied instruction classes must be taken in sequence. Students enrolled in these classes are required to pay a special applied fee. Non-music majors enroll in 100-level applied instruction. Advancement into 200- and 300-level applied instruction occurs through placement and proficiency testing. Music majors will enter at the 200-level applied instruction. Advancement into the 300-level will occur through placement and proficiency testing.  2 semester hours. Music Core Elective.  Course Repeatable. Maximum number of units allowed 8.

MUSI 350  Senior Recital. Preparation and presentation of a full solo performance program. Weekly mentoring sessions until performance will include practice with the accompanist, discussion of proper performance etiquette and the preparation of program notes. Pre-requisite: MUSI 250. Co-registration with Applied Music at the 300 level and consent of department.  2 semester hours. Music Core Elective.  Consent Required.

MUSI 351  Principles and Procedures in Music Education. This course surveys contemporary music education learning and pedagogical theories. Principles and practices of curriculum design applied to the development of the music curriculum. Individual or group work on elementary and secondary school music curriculum projects.  3 semester hours.

MUSI 352  Instrumental and Choral Conducting. Overview of choral conducting patterns. Score, voice and instrumental warm-up, and intonation. Tempo fluctuation, left hand, diction, discipline. Designed for music and music education majors.  3 semester hours.

MUSI 353  Instrumental and Choral Ensemble Literature. An advanced course focusing on the literature of choral and instrumental ensembles. Particular emphasis will be given to the ensemble literature needs of the student learners at the Elementary, Junior High, and High School Levels. Students enrolled in this course will learn the principles, techniques, and materials necessary for teaching the choral and instrumental ensemble literature. Current trends and teaching strategies for diverse student abilities and needs are examined. Methods for teaching basic skills in music reading, listening, and arranging will be presented in the course. Prerequisite: MUSI 202  3 semester hours.

MUSI 354  Teaching K-12 Classroom. The study of concepts and processes specific to and necessary for effective instruction in K-12 music education. Students explore various elementary and secondary music methods in both a classroom setting and in workshops by specialists in the field.  3 semester hours.

MUSI 360  Senior Seminar: Professional Portfolio. The students will analyze the job markets and prepare analyses of current issues in the performing arts. Analyses of demographics affecting the operations and organization of art programs in the United States will be studied. Students will be required to create a portfolio of personal data to prepare for job searches, prepare for mock interviews and present exhibition of works. Spring. Prerequisite: Junior Standing  3 semester hours. Music Core & Writing Intensive. Typically offered Spring Term.

MUSI 391  Topics. Special course focusing on various topics relating to the needs of the students and recent events and/or topics of interest. Topics to include areas of music literature, history, theory and pedagogy. Periodically.  1-3 semester hours. Typically offered Periodically.
MUSI 395  Independent Study. A course in which the student, under the supervision of the teacher, may study any one of the current music courses in an individual and independent manner. Prerequisite: Consent of instructor. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 3.

MUSI 397  Internship. A practical course intended to give those students who are qualified, an opportunity to do observing - either in a classroom or privately - or to perform any practical job associated with his or her field under the supervision of the faculty. Each semester. Prerequisite: Department Consent 3 semester hours. Typically offered Fall and Spring Terms.

MUSI 398  Student Teaching. The student will choose a school to student teach for a 16 week period. Students are expected to be ready to teach and prepare lesson plans, rehearse and teach sectionals, teach applied lessons, assist the host band or choir director in daily classroom tasks, teach a class using a lesson plan and give a test, conduct the band or choir during a concert. The students will record their experiences in a journal for revision and assessment by a Benedictine University teacher. 12 semester hours. Consent Required.

Natural Sciences

NTSC 107  Earth and Space Science. A physical science laboratory course that includes the study of key principles of Earth and Space Science through the investigation of real world problems. The earth science component includes the study of large-scale dynamic forces, events, and processes that affect the Earth’s land, water, and atmospheric systems, identification and evaluation of the uses of the Earth’s resources, and the processes involved in the life cycle. The space science component focuses on concepts that explain the composition, structure of and changes in the universe and Earth’s place in it. By working and studying within the context of a real world problem, students learn how scientific principles are used and applied in everyday life. IAI P1 909. Spring. 4 semester hours. Typically offered Spring Term.

NTSC 111  Contemporary Biology. This course includes the study of key principles of the Biological Sciences through the investigation of real world problems. Topics include molecular and cellular biology, genetics, evolution, ecology, organismal biology, and diversity. By including the science and technology history of the real world problems, students will learn how scientific principles are used and applied in everyday life; and understand how advancements in these principles influence “problem solving” paradigms in science and technology. The course will facilitate the students’ understanding of the scientific method by utilizing “hands-on science”, inquiry based, and field based laboratory experiments. Prerequisite: MATH 110 or equivalent. Fall. 3 semester hours. Life Science Core Elective.

NTSC 112  Contemporary Physical Science. A physical science laboratory course that includes the study of key principles of physics through the investigation of a real world problem (or problems). Topics include displacement, velocity, acceleration, force, momentum, work, energy, electricity, thermodynamics, optics, and modern physics. By working and studying within the context of the “real world” problem, students learn how scientific principles are used and applied in everyday life. They also come to understand how advancements in these principles influence “problem solving” paradigms in science and technology. The course facilitates the students’ understanding of the Scientific Method by utilizing “hands-on science” and “inquiry based” laboratory experiments. Spring, odd years. Prerequisite: MATH 110 or equivalent 3 semester hours. Physical Science Core Elective. Typically offered Spring Term, Odd Years.
NTSC 151 Natural Science Interdisciplinary Laboratory I. An integrated laboratory course intended to teach the philosophy and practice of experimental aspects of science. Students will learn skills related to laboratory safety, ethics, data acquisition and analysis, experimental design and the scientific method. Methods and instrumentation of laboratory investigation that are common to the disciplines of biology and chemistry will provide the focus for student development of a standard set of laboratory skills and techniques. The rationale behind experimental protocols and principles of up-to-date methodology and laboratory techniques are discussed in lectures and practiced in the laboratory. Fall. Prerequisites: Credit or co-registration in Math 210 or higher and credit or co-registration in Biol 197 or Biol 198 and/or Chem 113. NOTE: Satisfactory completion of NTSC 151 and NTSC 152 (three credit hours) is equivalent to, and may be substituted for BIOL 199 (one credit hour), CHEM 114 (one credit hour), and CHEM 124 (one credit hour). Fall. 1.5 semester hours. Life Science Core Elective. Typically offered Fall Term.

NTSC 152 Natural Science Interdisciplinary Laboratory II. This course is a continuation of NTSC-C151 and the study and practice of methods and instrumentation of laboratory investigation that are common to the disciplines of biology and chemistry. Both courses will provide the focus for student development of a standard set of laboratory skills and techniques that will be used in upper level courses. Prerequisites: Credit or co-registration in Math 210 or higher and credit or co-registration in BIOL 197 or BIOL 198 and/ or Chem 113. Spring. NOTE: Satisfactory completion of NTSC 151 and NTSC 152 (three credit hours) is equivalent to, and may be substituted for BIOL 199 (one credit hour), CHEM 114 (one credit hour), and CHEM 124 (one credit hour). Spring. 1.5 semester hours. Life Science Core Elective. Typically offered Spring Term.

NTSC 200 Natural Science Teaching. Teaching assistant. Offered each semester and summer. 1-2 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required. Course Repeatable. Maximum number of units allowed 99.

NTSC 210 Science and the Humanities. An integrative course of the sciences and humanities based on how different disciplines form the foundation on which the process of scientific investigation rests. Satisfies the HUMN-SCI core for the BA in Biology. Sophomore Standing. Periodically. 3 semester hours. Life Science Core Elective.

NTSC 398 College of Science Summer Research. This is a zero credit hour class which outlines the duties of the students who participate in the College of Science Research Program. Only a Pass/Fail grade will be given. Students who successfully complete the requirements will receive a passing grade. Students will sign up for the class at the beginning of summer and the grade will be posted when all requirements are completed. The latest assignments of grades will be in the spring semester of the following year. Offered summer. Typically offered Summer Term. Consent Required. Course Repeatable. Maximum number of units allowed 0.

Nuclear Medicine Tech

NMTC 331  Management and Methods of Patient Care. Skills in problem-solving, critical-thinking, and decision-making are developed as well as oral and written communication skills. Career skills are enhanced through the interview process, resume writing, and administrative duties including; budgeting, medical and legal considerations and political issues affecting health care. Special emphasis is placed on participation in a quality control program and scheduling guidelines. Focus on basic measures necessary to provide quality patient care. Basic principles of record keeping and maintaining confidentiality of information are explained. Prerequisite: Consent of instructor. 2 semester hours.

NMTC 332  Radiation Safety & Protection. Supervised practice and procedures for the receipt, handling, transporting, storage, usage, record keeping, disposal and decontamination of radioactive materials. Emphasis on licensing and regulations set forth by local, state, and federal agencies. Academic and clinical instruction to provide the student with radiation safety techniques to minimize exposure to themselves, the patient, public, fellow workers and themselves. Regulations regarding therapeutic dosages and follow-up procedures. 3 semester hours.


NMTC 334  Diagnostic Nuclear Imaging Practicum I & II. Supervised clinical education that gives the student the opportunity to perform a variety of patient procedures on both SPECT and PET imaging systems for all diagnostic, therapeutic, non-imaging in-vivo and in-vitro procedures. Clinical competencies developed in patient care, positioning techniques, analyzing images, and the selection of imaging parameters and collimators. Knowledge of integrated computer systems designed for use with clinical gamma cameras, Single Photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET) images. The clinical practicum is designed to promote independent critical thinking, balanced responsibility, organization and accountability in the student. Students will demonstrate competence in all procedures presented. 9 semester hours.

NMTC 335  Clinical Nuclear Imaging Procedures. Emphasis on theory and techniques of clinical procedures used in nuclear medicine imaging. Areas emphasized include patient care, developing acquisition parameters, imaging techniques, radionuclide identification, energies, half-lives, and principles of radionuclides in imaging and non-imaging procedures. Students will continue to develop an increased degree of competence in their performance of the skills related to critical thinking and problem solving. 3 semester hours.

NMTC 336  Radionuclide Chemistry and Radiopharmacy. The chemical, physical and biological properties of radiopharmaceuticals used in diagnosis and therapy. Emphasis is given to the preparation, calculation, identification, administration, and disposal of radiopharmaceuticals. Performance of all radionuclide quality control and quality assurance procedures. Principles of decay and half-life, tissue localization, chemical impurities, generator systems, dose preparation and techniques of good laboratory practices. 3 semester hours.

NMTC 337  Radiation Biology. Knowledge of cell structure and function as a basis for understanding cellular and organ responses to the effects of ionizing radiation, radionuclides and radiation oncology. Understanding units of exposure, organ dose calculation and body distribution. 2 semester hours.

NMTC 338  Computer Applications. Knowledge of the operations and maintenance of computer hardware and software. Emphasis on data collection, analysis and processing used in clinical imaging. Application of computer devices and memory usage. Emphasis on SPECT and PET quality control procedures. 3 semester hours.
NMTC 339  Clinical Correlation. Focus on the study of the structure and function of human cells, tissues, organs and systems. Clinical interpretation of organ systems with emphasis on immunology, and anatomy and physiology, which will provide a basis for understanding abnormal or pathological conditions as applied to nuclear medicine. Causes, symptoms, and treatments of disease are discussed as well as its effect on the images. In addition, the student is scheduled to observe the interpretation of images with the physician staff. 3 semester hours.

NMTC 340  Radiation Detection & Instrumentation. Evaluation, maintenance and function of instrumentation used in imaging and in the laboratory. Principles and theory of PET and scintillation camera operation and performance. Radiation measurement, event counting activity, pulse height spectra, detection efficiency, resolving time and statistics. Flood field and bar phantom use for assessing camera uniformity, relative sensitivity, spatial linearity and resolution testing. Quality assurance procedures for the PET scanner include radial, tangential and axial resolution, sensitivity, linearity, uniformity, attenuation accuracy, scatter determination and dead time corrections. 2 semester hours.

NMTC 341  Technical Mathematics. Practical mathematics in nuclear medicine including, radiation unity conversion, dose calculation, determination of specific activity, decay and half-life calculation, counting efficiency and statistics. 1 semester hour.

Nursing and Health

NRHL 200  Nursing Transitions. A bridge course that introduces the philosophy and concepts of baccalaureate nursing. Emphasis is placed on the components of professional nursing practice and supporting theories. 3 semester hours.

NRHL 213  Health Aspects of Aging. Focuses upon the normal aging process in American Society including biological, psychological and health aspects. Emphasis is placed on health services, health maintenance, and contemporary issues with respect to the elderly population. 3 semester hours. Life Science Core Elective.

NRHL 250  Statistics. Basic course in statistical techniques which includes measures of central tendency, probability, sampling, estimation and hypothesis testing. For nursing majors. 3 semester hours.

NRHL 290  Health Assessment. Presents the theory and process of health assessment. Focuses on history, physical examination, screening tests, and resultant nursing diagnoses. Clinical Lab provides for application of skills. 3 semester hours.

NRHL 295  Research. Explores the research process as it applies to nursing and health care. Emphasis is placed on analysis and critique of research studies. 3 semester hours.

NRHL 300  Transforming Care. Explores concepts of safety, quality and complementary and alternative therapies appropriate to the care of clients with acute, chronic or complex health problems. 3 semester hours.

NRHL 301  Family Health Nursing. Provides students with a foundation in the concepts/theories of family health care nursing. Selected clinical experiences emphasize application of family nursing principles. 4 semester hours. Writing Intensive Course.

NRHL 311  Community Health Nursing. Explores the physical, social, economic and environmental factors which affect the health of a community. Selected field experiences emphasize applying nursing process to population groups and communities. 3 semester hours.
NRHL 320  **Health Systems.** Overview of the history, basic structures and operations of public health and health care delivery systems. 3 semester hours.

NRHL 378  **Leadership and Management.** Introduces the functions of management within a rapidly changing health care environment. Emphasis is on current issues impacting leadership and management within nursing practice. 3 semester hours.

NRHL 395  **Nursing Elective.** Guides independent study in theoretical or clinical aspects of nursing. Consent of Department Coordinator; NRHL 378 and WRIT 102. 1-3 semester hours.  Consent Required.

**Nutrition**

**NUTR 100  Impact of Nutrition.** For non-majors. An introduction to nutrients; cultural, socioeconomic, and other influences on nutrition intake; impact of nutrition on health status; and issues of hunger and malnutrition. Each Semester. IAI L1 904. 3 semester hours. Life Science Core Elective. Typically offered Fall and Spring Terms.

**NUTR 110  Environmental Nutrition.** For non-majors. An introduction to nutrients and sources, digestive and metabolic processes, and the health impact of nutrient deficiencies and excesses. Discussion incorporates the relationships between food, nutrition, health, culture, and the environment. Environmental issues include world food supply and choices, food access and security, agriculture and production, and food safety. Requires a travel/study abroad component. Periodically. (Cannot receive credit for NUTR 100 or NUTR 200 and NUTR 110). 3 semester hours. Typically offered Periodically.

**NUTR 150  Food Service Sanitation.** An overview of applied Food Service Sanitation as it relates to proper food handling and training in the food service industry. Emphasis placed on prevention of food borne illness. At the completion of the course, students will take the Illinois Certification exam from the Educational Foundation of the National Restaurant Association. Spring. 1 semester hour.

**NUTR 190  Selected Topics in Nutrition.** Special topics in nutrition adjusted to the needs of students. Periodically. Topics may be changed so that the course may be repeated for credit. 1-3 semester hours. Typically offered Periodically.  Course Repeatable. Maximum number of units allowed 18.

**NUTR 200  Nutritional Science.** An integrated approach to the study of the requirements and functions of nutrients that are determinants of health and disease in human populations. (Note: Cannot receive credit for NUTR C100, NUTR C110 and C200). Each Semester. 3 semester hours. Life Science Core Elective. Typically offered Fall and Spring Terms.

**NUTR 241  Nutrition through the Life Cycle.** A life cycle approach to nutrition science; incorporates nutrient availability, function and sources; energy balance; health risk factors; and special nutrient needs for various stages of the life cycle. Each semester. 3 semester hours. Life Science Core Elective. Typically offered Fall and Spring Terms.

**NUTR 244  Food Science.** A study of the physical and chemical composition, structure, and functional properties of carbohydrates, proteins, and fats; sensory evaluation principles; and applications to food and nutritional health. Pre-requisite: CHEM 101 or CHEM 123. Fall. 3 semester hours.

**NUTR 245  Food Science Laboratory.** Applied sensory and physiochemical examination of study of the composition, structure, and functional properties of carbohydrates, proteins, and fats. Pre-requisite (transfer course) or co-registration in NUTR 244. Fall. Lab fee: $130. 1 semester hour.
NUTR 246 Experimental Foods Laboratory. Experimental application of physiochemical behavior of food. Includes recipe development/research. Spring. Prerequisite: NUTR 244 and 245. Lab fee: $130 1 semester hour. Typically offered Spring Term.

NUTR 250 Foodservice Operations. This course presents the following food service principles: menu planning, purchasing, and procurement, production, distribution and service, quality improvement, and layout and design. Pre-Requisite: NUTR 200 or 241 or 244. Fall/Spring. 3 semester hours. Typically offered Fall and Spring Terms.

NUTR 271 Nutrition Education. Nutrition education for groups and individuals in clinical and community settings. Learning and health behavior change theories. Applied concepts of needs assessment, goals and objectives, selection of learning activities and materials, development of educational plans, and evaluation procedures. Prerequisite: NUTR 200 or 241. Fall/Spring. 3 semester hours. Typically offered Fall and Spring Terms.

NUTR 280 Community Nutrition. Identification of current public health nutrition problems; influence of socioeconomic, cultural and psychological factors on food and nutrition behavior; available community programs; program development and marketing; and the implications of public policy legislation. Prerequisite: NUTR 200 OR 241. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

NUTR 290 Selected Topics in Nutrition. Special topics adjusted to the needs of the students. Topics may be changed so that the course may be repeated for credit. Periodically. 1-3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 18.

NUTR 295 Nutrition Teaching. Supervised teaching of nutrition in laboratories. Each semester. Prerequisite: NUTR 245, 246, or 298; Nutrition majors only and consent of instructor. May be repeated for credit. 1 semester hour. Typically offered Fall and Spring Terms. Consent Required. Course Repeatable. Maximum number of units allowed 18.

NUTR 296 Nutrition Services in the Community Practicum. Experience designed to meet interest of an individual student and serve a community need. Off-campus site. Transportation is required. Summer. Prerequisite: Consent of Instructor and Nutrition majors only. May be repeated for credit. Fee: $27.50 1-3 semester hours. Typically offered Fall and Spring Terms. Consent Required. Course Repeatable. Maximum number of units allowed 18.

NUTR 297 Quantity Foods Practicum. Supervised experience in foodservice operations and management, with emphasis on areas related to menu planning, food purchasing, cost control, and production, quality improvement, and applied sanitation and safety. May be at off-campus sites. Transportation may be required. Summer. Prerequisite: NUTR 250, 3.0 G.P.A., consent of Instructor, and nutrition majors only. 2-3 semester hours. Typically offered Fall and Spring Terms. Consent Required.

NUTR 298 Cultural Foods. An overview of the food habits of world cultures, including discussion of ways in which food, food production, food consumption and food rituals are associated with cultural norms, behaviors, social conventions, religious practices, and individual and group ways of living. Laboratory component provides exposure to traditional foods and cooking techniques. Pre-requisite: NUTR 244 and 245; co-registration lecture and lab (NUTR 298A&B). Each semester. 2 semester hours. Typically offered Fall and Spring Terms.
NUTR 341 Medical Nutrition II. Physiological and biochemical aspects of nutrient metabolism; interrelationships between cellular reactions, nutrition, and health; biochemical and physiological principles of nutrition for obesity, eating disorders, alcohol metabolism, inborn errors, the nervous system. Spring. Prerequisite: BIOL 108 or BIOL 198, NUTR 200 or NUTR 241, and BCHM 251 or 261. 3 semester hours. Typically offered Spring Term.

NUTR 342 Applied Nutritional Physiology. This class is designed to provide a detailed survey of the literature related to the nutrition and physical activity aspects of Metabolic Syndrome Related Diseases. Students will be expected to have a comprehensive understanding of the epidemiology and scientific basis of Metabolic Syndrome. Detailed discussions will include CVD, diabetes, hypertension, obesity, hyperlipidemia, and systemic inflammation as they relate to nutrition and physical activity. Pre-requisites: NUTR 200 or 241; BCHM 251 or 261 and BIOL 258 (basic nutrition, biochemistry and physiology courses). Cross-listed as NUTR 342 and NTR 542. Spring semester. 3 semester hours.

NUTR 345 Science of Sports Nutrition. The course examines the metabolic and physiologic basis for macronutrient and micronutrient recommendations during training, competition/performance, and recovery. Includes disease applications and case studies. Pre-requisites: BIOL 258, BCHM 251 or 261, and NUTR 200 or 241. Spring. 3 semester hours. Typically offered Spring Term.

NUTR 350 Food and Nutrition Services Management. This course presents the students with information regarding the key concepts of organization structure and management principles including: fiscal control, performance measurements, human resource and information management, and marketing. Prerequisite: NUTR 250 and co/registration in MGT/PSYC 320. 2 semester hours. Typically offered Fall, Spring, and Summer Terms.

NUTR 371 Medical Nutrition Therapy I. Pathology, treatment and nutritional therapy of chronic and acute diseases. Prerequisite: BIOL 258, NUTR 200 or 241. 4 semester hours. Typically offered Fall, Spring, and Summer Terms.

NUTR 372 Clinical Nutrition Case Studies Lab. A problem-based learning approach to case studies, integrated with a traditional didactic approach, to foster development of independent critical thinking skills. Incorporates medical record reviews, development of clinical and education plans, and documentation techniques. Part of the course is supervised at an off-campus site; transportation is required. Credit or co-registration in NUTR 371, 391 and 392. Each semester. 2 semester hours. Typically offered Fall and Spring Terms.

NUTR 373 Advanced Menu Planning Lab. Applied process of translating the nutritional needs into menus for healthy persons and those with special dietary considerations, throughout the life span. Includes management and quality improvement principles. Prerequisite: NUTR 250 and Credit or co-registration in NUTR 371. 1 semester hour. Typically offered Fall, Spring, and Summer Terms.

NUTR 381 Behavioral and Social Aspects of Public Health. Addresses behavioral and social factors and theories related to individual and population health. Prerequisite: Senior standing and consent of Nutrition Department Chairperson. Note: This course is a cross-listed public health course (MPH 601). It does not count towards science core or major credit. 3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required.

NUTR 382 Public Health Systems. It explores the history, basic structures and operations of public health and health care delivery systems based on Essential Public Health Services. Prerequisite: Senior standing and consent of Nutrition Department Chairperson. Note: This course is a cross-listed public health course (MPH 602). It does not count towards science core or major credit. 3 semester hours. Consent Required.
NUTR 383 Ethical and Political Issues. Applies basic principles of ethical analysis (e.g. Public Health Code of Ethics, human rights framework, other moral theories) to issues of public health practice and policy. Prerequisite: Senior standing and consent of Nutrition Department Chairperson. Note: This course is a cross-listed public health course (MPH 603). It does not count towards science core or major credit or PHIL core. 3 semester hours. Consent Required.

NUTR 390 Selected Topics. Special topics in nutrition adjusted to the needs of the students. Topics may be changed so that the course may be repeated for credit. Prerequisites: refer to the course schedule (usually NUTR 200 or 241, BCHM 261, BIOL 258, and consent of Nutrition Department Chairperson). Periodically. 1-3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 18.

NUTR 391 Nutrition Assessment lab. Professional practice roles, methods, and skills. Emphasis on developing skills in medical terminology and nutrition assessment (i.e. anthropometrics and other body composition indicators, biochemical indices, clinical symptomatology, dietary intake) for health promotion and disease prevention. Learning experiences include practice in the campus and community. Transportation may be required. Pre-requisite: Credit or co-registration in NUTR 371. Lab fee: $130. Each semester. 1 semester hour. Typically offered Fall and Spring Terms.

NUTR 392 Nutrition Research and Professional Writing. Critique nutrition literature as foundation to develop a professional manuscript, journal critique and write for public audiences. Prerequisite: WRIT 102; BIOL 229 or PSYC 150; and credit or concurrent registration in NUTR 341 or NUTR 371. Fall/Spring. 2 semester hours. Writing Intensive Course. Typically offered Fall and Spring Terms.

NUTR 395 Nutrition Counseling Lab. Interviewing and counseling methods and techniques. Prerequisite: NUTR 271 and credit /co-registration in NUTR 392. Nutrition majors only. Spring. 1 semester hour. Typically offered Spring Term.

NUTR 396 Specialized Nutrition Practicum. Supervised experience designed to meet the interest of an individual student. May be at off-campus sites. Transportation may be required. Each semester and summer. Prerequisite: Nutrition majors only and Instructor consent. Fee: $27.50 1-3 semester hours. Typically offered Fall and Spring Terms. Consent Required.

NUTR 399 Nutrition Research. A supervised nutrition research project that is conducted on or off campus. May be repeated for credit. Each semester. Nutrition majors only, and Instructor consent. 1-3 semester hours. Typically offered Fall and Spring Terms. Consent Required. Course Repeatable. Maximum number of units allowed 18.

Philosophy

PHIL 120 Greek Philosophy. A historical introduction to Greek thought. Fall. IAI H4 901. 3 semester hours. Philosophy Core Elective.

PHIL 191 Selected Topics. Special philosophical issues offered at the introductory level according to the interest of faculty and students. Periodically. 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.

PHIL 200 Introduction to Logic. What is the difference between a sound and an unsound argument? How can one tell the difference between good reasoning and bad? What sorts of evidence should one accept for certain claims? As we pursue these questions, we will discuss and practice the fundamentals of both informal and formal logic. Fall, yearly. 3 semester hours. Philosophy Core Elective.
PHIL 205 Philosophy of Human Nature. Investigation of the classic questions regarding the human person: unity, freedom, death and immortality, mind-body relation, and community. Spring. 3 semester hours. Philosophy Core Elective.

PHIL 210 Philosophy of Being. Examination of the basic principles of reality which affect all thought: change and permanence, unity in diversity, the meaning of existence, goodness, truth and beauty, the categories of being, and the analogy of being. Fall. 3 semester hours. Philosophy Core Elective.

PHIL 215 Theory of Knowledge. Analysis of the nature, possibility, foundations, and extent of human knowledge. Fall. 3 semester hours. Philosophy Core Elective.

PHIL 220 Mediterranean World. See HUMN 220. Offered yearly. 3 semester hours.

PHIL 225 Medieval Philosophy. Survey of philosophy from Augustine to the 14th Century. Offered: Spring, even years only. 3 semester hours. Philosophy Core Elective.

PHIL 230 Contemporary Anglo-American Philosophy. This course is a survey of late 19th and 20th Century English-speaking, British and North American Philosophies. Fall, odd years. 3 semester hours.

PHIL 235 Modern Philosophy. Survey of philosophy from the 15th century to the early 19th century. Fall, even years. 3 semester hours. Philosophy Core Elective. Typically offered Fall Term, Even Years.

PHIL 240 Converging Hemispheres. Fall, yearly. 3 semester hours. Philosophy Core Elective.

PHIL 245 General Ethics. Investigation of ethical concepts and theories and an analysis of the norms of ethical decision. Spring, yearly. 3 semester hours. Philosophy Core Elective.

PHIL 246 General Ethics for the Bio-Medically-Minded. Course covers major schools of thought on ethics within the bio-medical arena. 3 semester hours. Philosophy Core Elective.

PHIL 247 General Ethics for the Business-Minded. Course covers major schools of thought on ethics within the business arena. 3 semester hours. Philosophy Core Elective.

PHIL 248 General Ethics for the Ecology-Minded. Course covers major schools of thought on ethics within the environmental/ecology arena. 3 semester hours. Philosophy Core Elective.

PHIL 249 General Ethics for the Professional. Investigation of ethical concepts and theories and an analysis of the norms of ethical decision and the relationship of these to professionals in all fields. It provides a solid foundation in moral theory, recast in light of postmodern critiques of moral philosophy, together with diverse applications to help students understand the philosophical complexity of ethical challenges that arise for professionals in all types of work and can help students from all disciplines better understand how to resolve ethical challenges in the modern workplace. Fall and Spring. 3 semester hours. Philosophy Core Elective.

PHIL 250 Contemporary World. See HUMN 250 with philosophical emphasis. Spring. 3 semester hours. Philosophy Core Elective.
PHIL 255  Contemporary Continental Philosophy.  3 semester hours. Philosophy Core Elective.

PHIL 260  Social & Political Philosophy.  Course covers the philosophy of societal change, the forces that being about change and the revolutionary potential of change.  3 semester hours. Philosophy Core Elective.

PHIL 265  Contemporary Anglo-American Philosophy.  Course covers 19th and 20th century philosophical movements in America and Britain.  3 semester hours. Philosophy Core Elective.

PHIL 270  Medieval Philosophy.  This course uses elements of fiction and non-fiction in the study of various topics of race, class and gender in American Studies (Topics vary).  Cross listed with PHIL 370.  3 semester hours. Philosophy Core Elective.

PHIL 285  Topics in Philosophical Exploration of Religion.  This course is an investigative exploration of some of the fundamental philosophical questions and relationships pertaining to the nature, practice, and understanding of religion or Theology. Periodically.  3 semester hours. Typically offered Periodically.

PHIL 290  History and Philosophy of Science.  Course covers the historical, philosophical and ethical questions of the scientific revolution through the present.  3 semester hours. Philosophy Core Elective.

PHIL 291  Philosophical Topics.  Special philosophical issues offered at the intermediate level according to the interest of faculty and students. A topics course may apply toward the divisional core.  3 semester hours. Philosophy Core Elective.  

PHIL 295  Independent Study.  Special philosophical issues offered according to the interest of faculty and students.  Prerequisite: Consent of instructor.  1-3 semester hours.  Consent Required. Course Repeatable. Maximum number of units allowed 99.

PHIL 315  Theory of Knowledge.  Analysis of the nature, possibility, foundations, and extent of human knowledge.  3 semester hours. Philosophy Core Elective.

PHIL 325  Medieval Philosophy.  Survey of philosophy from Augustine to the 14th century.  3 semester hours. Philosophy Core Elective.

PHIL 330  Contemp Anglo-Amer Philosophy.  This course is a survey of late 19th adn 20th Century English - speaking, British and North American Philosophies. Fall, odd years.  3 semester hours. Philosophy & Writing Inten. Typically offered Spring Term, Even Years.

PHIL 335  Modern Philosophy.  Survey of philosophy from Descartes to Kant.  3 semester hours. Philosophy Core Elective.

PHIL 345  Topics in Philosophical Ethics.  3 semester hours.
PHIL 346  Biomedical Ethics. In this class, students will investigate fundamental ethical questions pertaining to health, medicine, and the life sciences. It is a course in applied ethics - where the application of general ethical theory is to the contemporary moral issues of medicine and biology. Pre-requisite: A Philosophy course. Offered Spring. 3 semester hours. Philosophy Core Elective.

PHIL 347  Ethics for the Business-Minded. Course covers major schools of thought on ethics within the business arena. 3 semester hours. Philosophy Core Elective.

PHIL 348  Ethics for the Ecologically Minded. Course covers major schools of thought on ethics within the environmental/ecology arena. 3 semester hours. Philosophy Core Elective.

PHIL 355  Philosophy of Law. Conceptual and moral investigation of the nature of the law and of practical legal issues, such as civil disobedience or the obligation to obey the law. Periodically. 3 semester hours. Typically offered Periodically.

PHIL 360  Social and Political Philosophy. Course covers the philosophy of societal change, the forces that being about change and the revolutionary potential of change. 3 semester hours. Philosophy Core Elective.

PHIL 370  Medieval Philosophy. Survey of philosophy from Augustine to the 14th Century. Offered spring, even years only. Cross listed with PHIL 270. 3 semester hours. Philosophy Core Elective. Typically offered Spring Term, Even Years.

PHIL 385  Topics in Philosophical Exploration of Religion. This course is an investigative exploration of some of the fundamental philosophical questions and relationships pertaining to the nature, practice, and understanding of religion or Theology. Periodically. 3 semester hours. Typically offered Periodically.

PHIL 390  History and Philosophy of Science. Course covers the historical, philosophical and ethical questions of the scientific revolution through the present. 3 semester hours. Philosophy Core Elective. Consent Required.

PHIL 391  Selected Topics. Special philosophical issues offered at the advanced level according to the interest of faculty and students. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

PHIL 395  Independent Study. Designed to encourage the superior student to study in depth and to research an area beyond the undergraduate course offerings. Prerequisite: Consent of instructor. 3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

PHIL 397  Internship. Practical experience in a related career field under the supervision of the philosophy program. Prerequisite: Department consent. 3 semester hours. Consent Required.

**Physical Education**

PHED 200  Philosophy and Foundation of Physical Education. This course is an introduction to physical education as both an academic discipline and profession including philosophical and scientific principles, current trends and practices, and career opportunities. Physical Education advocacy techniques will also be introduced in this course. (To be taken concurrently with PHED 201). Pre-requisite: PHED 201. 3 semester hours. Typically offered Fall Term.
PHED 201  Assessment and Teaching for Lifetime Physical Fitness. This course provides students with an understanding of the positive impact of healthy lifestyle choices. Students will learn self-management skills and goal setting as they design their personal fitness plans and then work on self-designed goals by participating in a fitness program during the course of the term. Includes classroom discussion and laboratory experiences to assess an individual's current wellness needs. Students will also participate in self-directed activities outside the classroom to achieve goals. (To be taken concurrently with PHED 200). $30 lab fee. Fall. 2 semester hours. Typically offered Fall Term.

PHED 240  Teaching Team Sports and Activities. This course is designed to provide knowledge and understanding of instructional methods and organization in team activities. An emphasis will be placed on strategies to adapt or maximize student participation. 2 semester hours. Typically offered Fall Term.

PHED 241  Teaching Individual Sports and Activities. This course is designed to provide knowledge and understanding of instructional methods and organization in individual activities. An emphasis will be placed on strategies to adapt for maximum student participation. Department consent required. Spring, yearly. 2 semester hours. Typically offered Spring Term.

PHED 243  Teaching Basic Dance and Rhythms. This course provides instructional strategies in the creative use of rhythms and dance in physical education. Department request. Offered fall, yearly. 3 semester hours. Typically offered Fall Term. Consent Required.

PHED 257  Wellness. Concepts and applications of cardiovascular fitness, nutrition and weight management, stress management lifestyle management, and substance abuse. Emphasis is on the interactive nature of these health-related components, on being an informed consumer, and on the development and implementation of a personal wellness program. Satisfies teaching certification Health/Physical Education requirement. 2 semester hours.

PHED 260  First Aid and CPR. This course provides instruction in first aid, safety, cardiopulmonary resuscitation (CPR), and the use of AED. Certification in First Aid and CPR will be available through the American Red Cross. Spring, yearly. 3 semester hours. Typically offered Spring Term.

PHED 270  Growth and Development of Children and Adolescents. This course discusses motor development of children and youth (birth through adolescence) with emphases on physiological growth, movement, motor skill development, and brain and exercise research. Spring, yearly. 2 semester hours. Typically offered Spring Term.

PHED 300  Physical Education for Special Populations. This course prepares the physical educator to adapt and modify activities to encourage integration of exceptional children into regular physical education classes. Pre-req: EDUC 260 and Department consent. 3 semester hours. Typically offered Spring Term. Consent Required.

PHED 302  Kinesiology. This course is designed to study muscles and their role in the science of human motion. This course is based on anatomical and mechanical principles with emphasis on the analysis of human movements in games, sports other physical education skills, and basic movement activities. Laboratory experiences will also be provided to augment kinesiological concepts covered. Pre-requisite: BIOL 155. Spring, yearly. 3 semester hours. Typically offered Spring Term.
PHED 305 Measurement and Evaluation for Physical Education. This course provides students with an understanding of current assessment techniques for physical education and physical fitness in order to select and use developmentally appropriate strategies and instruments that align with physical education learning goals. Students will also learn to apply performance data to make informed curricular decisions relative to the physical education program. Instructor consent. Fall, yearly. 3 semester hours. Consent Required.

PHED 308 Administration of Physical Education. This course provides administrative concepts and application to physical education programs with an emphasis on leadership, program management, program evaluation, personnel, facilities, budgeting, and curriculum. Emphasis will be placed on current research and current program assessment techniques. Consent required. Fall, yearly. 3 semester hours. Typically offered Fall Term. Consent Required.

PHED 320 Physical Education Curriculum Design. This course will focus on the development and integration of a team building program into the overall school curricula. Consent required. 3 semester hours. Typically offered Fall Term. Consent Required.

Physics

PHYS 101 Physical Science. An introduction to the basic concepts of physics and scientific reasoning relating to the experiences encountered in the everyday physical environment. For non-science majors. Each semester. IAI P9 900. 3 semester hours. Physical Science Core Elective. Typically offered Fall and Spring Terms.

PHYS 105 Physical Geography. An introduction to hydrology and the physical processes operating in and on the planet earth. Topics of study will include ground and surface water, the hydrologic cycle, watershed models, groundwater recharge, geomorphology, tectonics, structural features, and geological processes relating to natural resource management, environmental processes and concerns. Periodically. 3 semester hours. Physical Science Core Elective. Typically offered Periodically.

PHYS 106 Astronomy. Examines astronomical phenomena and concepts including the solar system, stars, galaxies, planetary motion and the evolution of the universe. 3 semester hours. Physical Science Core Elective.

PHYS 107 Earth and Space Science. A physical science laboratory course that includes the study of key principles of Earth and Space Science through the investigation of real world problems. The earth science component includes the study of large-scale dynamic forces, events, and processes that affect the Earth’s land, water, and atmospheric systems, identification and evaluation of the uses of the Earth’s resources, and the processes involved in the life cycle. The space science component focuses on concepts that explain the composition, structure of and changes in the universe and Earth’s place in it. By working and studying within the context of a real world problem, students learn how scientific principles are used and applied in everyday life. IAI P1 909. Spring. 4 semester hours. Typically offered Spring Term.

PHYS 113 College Physics I. PHYS 113, 114, 118 and 119 constitute a complete non-calculus introductory physics sequence including laboratory for life sciences majors. Topics for PHYS 113 include vectors, classical mechanics, heat and wave phenomena. Fall, summer. IAI P1 900; BIO 903. Prerequisite: "C" or better in MATH 111. 3 semester hours. Physical Science Core Elective. Typically offered Fall and Summer Terms.

PHYS 114 College Physics I Lab. Selected experiments to illustrate the experimental methods and the principles studied in PHYS 113. Fall, summer. IAI P1 900L; BIO 903. Prerequisite: credit or co-registration in PHYS 113. 1 semester hour. Physical Science Core Elective. Typically offered Fall and Summer Terms.
PHYS 118  College Physics II. Topics include electromagnetism, light, atomic physics, and nuclear physics. Spring, summer. IAI MTM 902L; BIO 904. Prerequisite: PHYS 113. 3 semester hours. Physical Science Core Elective. Typically offered Spring and Summer Terms.

PHYS 119  College Physics II Lab. Selected experiments to illustrate the concepts studied in PHYS 118. Spring, summer. IAI MTM 902L; BIO 904. Prerequisite: PHYS 114 and credit or co-registration in PHYS 118. 1 semester hour. Physical Science Core Elective. Typically offered Spring and Summer Terms. Course Repeatable. Maximum number of units allowed 1.

PHYS 205  University Physics I Lab. Designed to acquaint the student with experimental methods and techniques with applications to the topics studied in PHYS 211. Fall. Prerequisite: Credit or co-registration in PHYS 211. 1 semester hour. Physical Science Core Elective. Typically offered Fall Term.

PHYS 206  University Physics II Lab. Designed to acquaint the student with experimental methods and techniques with applications to the topics studied in PHYS 212. Spring. IAI EGR 912. Prerequisite: PHYS 205 and credit or co-registration in PHYS 212. 1 semester hour. Physical Science Core Elective. Typically offered Spring Term.

PHYS 207  Modern Physics Lab. Experimental physics course designed to cover laboratory methods and techniques that apply to topics from Modern Physics. Topics to be covered include electron charge to mass ratio, crystal scattering, spectroscopy, blackbody radiation, scanning probe microscopy, photon, tunneling, lasers, semiconductor devices, holography, radioactive decay, and the photoelectric effect. Pre-requisite: Physics 213 or consent of instructor 1 semester hour.

PHYS 211  University Physics I. An introductory treatment of mechanics, waves, and heat. Topics include vectors, statics, dynamics, work, energy, collisions, rotational motion, gravitation, hydrostatics, vibrations, ideal gases, heat, and thermodynamics. The courses PHYS 211, 212 and 213 constitute a complete sequence for science, mathematics, computer science, and engineering students. Fall. IAI EGR 912. Prerequisite: Credit or co-registration in MATH 210 or MATH 220. 4 semester hours. Physical Science Core Elective. Typically offered Fall Term.

PHYS 212  University Physics II. Electric field and potential, dielectrics, magnetic forces and fields, electromagnetic induction, DC and AC circuits, EM-waves, light, and optics. Spring. IAI EGR 912; MTH 921. Prerequisite: PHYS 211 and credit or co-registration in MATH-211 or Math 221. 4 semester hours. Physical Science Core Elective. Typically offered Fall Term.

PHYS 213  Modern Physics. An introduction to the fundamental concepts of modern physics and quantum mechanics for science and engineering students. Subjects include relativistic mechanics, electromagnetic waves, wave-particle duality, wave mechanics, atomic structure, band theory, and properties of nuclei. Fall. IAI EGR 914. Prerequisite: PHYS 118 or PHYS 212 and credit or co-registration in MATH 212. 3 semester hours. Writing Intensive Course. Typically offered Fall Term.

PHYS 220  Analytical Mechanics. This course presents an intermediate treatment of Newton's law in various coordinate systems, projectile motion including air resistance, momentum, angular momentum, energy and conservative forces, driven and damped oscillators, LaGrange's equations, two-body central force problems, mechanics in non-inertial frames, rotational motion of rigid bodies, and coupled oscillators. The course introduces vector calculus, differential equations, complex numbers, Taylor series, and matrices in the solutions to problems. Fall. IAI EGR 942. Prerequisites - PHYS 211 and credit or co-registration in MATH 211. 3 semester hours. Typically offered Fall Term.
PHYS 264  **Electronics.** An integrated laboratory and lecture course designed to cover the basic principles of modern electronics. Topics include AC and DC circuits, linear and non-linear devices, power supplies, operational amplifiers, and logic circuits. Lecture and laboratory work are integrated allowing the students to test the theory through projects that the students design and build. Spring. Pre-Requisite: Phys 118 or 212 or consent of the Instructor. Cross listed with PHYS 264. 3 semester hours.

PHYS 291  **Selected Topics.** Current topics in physics or biophysics. Periodically. Prerequisite: Dependent upon topic. 3 semester hours. Typically offered Periodically.

PHYS 296  **Physics Teaching.** Teaching assistant. Offered each semester and summer. 1-2 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required. Course Repeatable. Maximum number of units allowed 99.

PHYS 300  **Instrumentation Lab.** Class at IIT. 3 semester hours. Typically offered Offered at IIT. Consent Required.

PHYS 304  **Nuclear Science.** Origins and nature of nuclear and atomic radiation, interaction of radiation with matter, radiation detectors, detection systems, and radiation safety. Lecture and laboratory. Intended for any qualified sciences student. Periodically. Prerequisite: Consent of instructor. 2 semester hours. Typically offered Periodically. Consent Required.

PHYS 305  **Classical Thermodynamics.** Properties of gases, relating heat and work, concepts of enthalpy and entropy, heat engines, mixtures, and phase changes. Fall. Prerequisite: CHEM 123, PHYS 118 or 212, and Math 212. Cross listed with CHEM / PHYS 313. 3 semester hours. Typically offered Fall Term.

PHYS 314  **Physical Chemistry I Laboratory.** Applies principles discussed in CHEM 313. Fall. Prerequisite: Registration or credit in CHEM 313. 1 semester hour. Writing Intensive Course. Typically offered Fall Term.

PHYS 315  **Quantum and Statistical Mechanics.** Failures of classical physics, development of quantum theory, atomic structure and spectra, statistical mechanics, and statistical thermodynamics. Spring. Prerequisites: PHYS 313 and credit/co-registration in Math 260 or 300. Cross listed with CHEM / PHYS 315. 3 semester hours. Typically offered Spring Term.

PHYS 316  **Physical Chemistry II Laboratory.** Applies principles discussed in CHEM 315. Spring. Prerequisite: Credit or co-registration in CHEM / PHYS 315. Cross listed with CHEM / PHYS 316. 1 semester hour. Writing Intensive Course. Typically offered Spring Term.

PHYS 323  **Biophysics.** A calculus-based introduction to biophysical concepts and computational methods for science majors using Excel. The course is an integrated lecture and computer lab experience. Topics covered include membrane transport, equilibrium and the Nernst potential, properties of random walks and diffusion, and an introduction to molecular dynamics methods. (Students cannot earn credit in both BIOL/CHEM/PHYS 323 and BIOL 310). Prerequisites: CHEM 123, PHYS 118 or 212, MATH 211 or 221. Spring. Cross listed with BIOL/CHEM/PHYS 323. 4 semester hours. Typically offered Spring Term.
PHYS 340  **Electricity and Magnetism I.**  Theoretical study of classical electrostatics and electrodynamics. Topics include vector calculus of the electromagnetic field, electric field and potential, conductors, Laplace equations, boundary value problems, multipoles, polarization, dielectrics, magnetostatics, divergence and curl of the magnetic field, magnetization, Ampere's law, electrodynamics, electromagnetic induction, and Maxwell's equations. Periodically. Prerequisites: PHYS 118 or PHYS 212 and MATH 260. 3 semester hours.

PHYS 357  **Molecular Dynamics and Kinetics.**  Electric properties of molecules, molecular interaction, molecular motion, chemical kinetics, molecular reaction dynamics. Periodically. Credit or co-registration in PHYS 315. 3 semester hours. Typically offered Periodically.

PHYS 374  **Experimental Modern Physics.**  A laboratory course designed to cover methods and topics in experimental physics for advanced science students. The course allows students to gain hands-on experience investigating topics that can include chemical physics, bio-physics, sensors, modern physics, optics, electronics, and other advanced concepts with the goal of improving the connection between experimental results and theory. The experiments that will be covered in the course will vary from term to term depending on the interests of the students. Periodically. Prerequisites-PHYS 207 and 213 or consent of instructor. 2 semester hours.

PHYS 390  **Selected Topics in Physics.**  Lecture course covering topics with which the student has not become acquainted in formal course work. May be an extension of or supplement to material previously encountered or material from a completely new area. Periodically. Prerequisite: PHYS 213 and MATH 260, and consent of instructor. 3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

PHYS 393  **Internship.**  Practical experience in physics or related career areas under the supervision of the Physics Program. Prerequisite: Consent of faculty coordinator. 1-3 semester hours.

PHYS 395  **Independent Study.**  Designed to encourage desire in superior students to continue the study of physics beyond the scope of undergraduate course offerings through guided independent study. Periodically. Prerequisite: Consent of instructor. 2 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

PHYS 398  **Research.**  Original research in physics or biophysics conducted under the supervision of a faculty or adjunct faculty member. Periodically. Prerequisite: consent of instructor. 1-3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

Political Science

PLSC 100  **Principles of Politics.**  Analyzes the political process and institutions in the United States and foreign nations. IAI S5 903. 3 semester hours. Political Science Core Elect.

PLSC 101  **Global Affairs.**  This course explores some of the major issues in contemporary world politics. The end of the Cold War and the demise of the bipolar superpower relationship has reverberated across all issues in international affairs. We will consider such international issues as military security, ethnicity and nationalism, the international economy, the environment, and regional issues. Each week's readings presents an overview of the topic for that week, discussing the changing nature and relevance of the issue in light of the momentous changes taking place in the "world order." The final week will explore the role of the US in this changing world. IAI S5 904N. 3 semester hours. Political Science Core Elect.
PLSC 102 American Government. Satisfies both the U.S. and Ill. Constitution requirements for teacher certification. IAI S5 900. Political Science majors and minors should take PLSC 103, Introduction to the American Political System. Credit will not be granted for both PLSC 102 and PLSC 103. 3 semester hours. Political Science Core Elect.

PLSC 103 Introduction to the American Political System. Introduces students to the American political system: its foundations, institutions, political processes, and policy areas. Special focus on the role of citizens in America - how one can participate, when participation can make a difference and how one can even begin a career in government service. Course intended for Political Science majors and minors. Credit will not be granted for both PLSC 102 and PLSC 103. 3 semester hours.

PLSC 105 Law and Politics. An analysis of law, justice, rights, court procedures, and legislation. The development of various concepts of law and individual and group rights. Credit will not be granted for both PLSC 105 and PLSC 205. 3 semester hours. Political Science Core Elect.

PLSC 128 Proseminar in Politics. Proseminar led by Distinguished Fellow Jim Ryan. Topics change every semester. 1 semester hour. Course Repeatable. Maximum number of units allowed 9.

PLSC 150 Introduction to Statistics. Basic course in statistical techniques which includes measures of central tendency, probability, sampling, estimation and hypothesis testing. For non-business majors. Each semester. IAI M1 902. Prerequisite: "C" or better in MATH 105 or MATH 110. 3 semester hours.

PLSC 201 State and Local Government. The inter-relationships between national, state, county, and local governments. (Satisfies the Illinois Constitution requirement for teacher certification.) IAI S5 902. 3 semester hours.

PLSC 205 Judicial Process. An introductory course, required for all majors and minors, designed to provide an in-depth understanding of the judicial process in the US. Credit will not be granted for both PLSC 105 and PLSC 205. 3 semester hours.

PLSC 210 Introduction to International Relations. Analysis of the processes of interaction among nations and groups of nations within the international political system. IAI S5 904N. 3 semester hours. Political Science Core Elect.

PLSC 213 American Foreign Policy. This course offers an overview of recent American Foreign policy and concentrates on both international and domestic pressures placed on foreign policy leaders. Students will participate in decision situations and debate policy options. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 215 Model United Nations. The use of simulation techniques to develop an understanding of the processes and operations of the United Nations. The course culminates with the students participating in the National Model United Nations. 3 semester hours. Political Science Core Elect. Course Repeatable. Maximum number of units allowed 45.
PLSC 216  Genocide: The Politics of Hate, Fear, Terror and Power. This is a survey course on genocide, one of the most controversial and deadly concepts in all of contemporary politics. We will learn how hate, fear, terror and power have repeatedly converged to produce the most deadly crime humanity has yet conceived. Genocide -- against Armenians in Turkey, The Holocaust, Cambodia's Killing Fields, Bosnia-Herzegovina, Rwanda, Kosovo, and Darfur -- has been a repeated policy used by murderous regimes of many types over the last 100 years. We will study these cases, and the general concept of genocide, in the context of basic themes from the Political Science fields of international relations, comparative politics, and foreign policy studies. No pre-existing knowledge of or exposure to any of these areas is assumed or necessary. Pre-requisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 217  Revolutions and Political Violence. Analyzes theories of revolution and studies a variety of 20th century revolutions. Also considers concepts of terrorism, guerilla warfare and nonviolent revolution. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 218  Nationalism and Terrorism. This course applies theoretical and analytical tools from the fields of International Relations and Comparative Politics in an attempt to understand the two most serious threats of global security in the post-Cold War world - nationalism and terrorism. Most of the death due to political violence in recent years has been directly or indirectly linked to nationalist movements of terrorist methods. It is critical that citizens in democratic states be informed on these matters, to understand what they are and are not, in order to be responsible citizens. Periodically. PLSC 103, 105, 205, or 210. 3 semester hours. Typically offered Periodically.

PLSC 219  International Political Economy. Examines the politics of international economics and, to a lesser extent, the economic determinants of international politics. Every other year. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 220  Comparative Politics. Concerned with identification of political trends and empirical generalizations of selected political systems. IAI S5 905. 3 semester hours.

PLSC 222  Russian Politics in Comparative Perspective. Analyzes the politics, economics, and social changes of post-communist states, comparing Russia's post-communist experience with that of other states in the Former Soviet Union and Eastern Europe. The fundamental focus of all discussions and readings is on the requirements of and obstacles to the creation of a democratic political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 224  Democracy & Democratization. Examines the theory and practice of democracy around the world, and the question of "transitions to democracy" through analysis of the problems of creating a democratic political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 230  US Constitutional Law I. A study of the Constitution as a living and changing document underlying our entire system of government; the role played by the judiciary in developing Constitutional law. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 231  Constitutional Law II. A study of the Constitution as a living and changing document underlying our entire system of government; the role played by the judiciary in developing Constitutional law. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.
PLSC 236 Women in the Law. This course introduces students to basic concepts in the history and development of feminist thought while applying the knowledge to actual cases and legal situations affecting women. By examining the various controversies and problems that pervade this aspect of politics, students will achieve a greater awareness of how the American legal system helps to shape issues relating to gender. Spring, even years. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours. Typically offered Spring Term, Even Years.

PLSC 237 Mock Trial. An overview of the mechanics of courtroom procedure. Usually taught in conjunction with the mock trial competition. May be repeated for credit. Fall and Spring. 3 semester hours. Typically offered Fall and Spring Terms. Course Repeatable. Maximum number of units allowed 99.

PLSC 240 CCL Public Service Fellow. Public Service Fellows register for this course as part of their requirements as a Fellow. Requirements variable, as determined by the CCL Director and communicated to Fellows upon their nomination. Instructor consent. Typically offered Fall and Spring Terms. Consent Required.

PLSC 241 Presidential and Congressional Politics. Study of the American presidency; the background, powers and relations with the other components of the political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 242 Congress & Legislative Process. Concentrates on the whole spectrum of the legislative process in the United States. Features simulation of the US House. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 243 American Political Thought. Analyzes major American political theorists and the effects their thoughts have had on structuring our governmental institutions and shaping the political values and behavior of Americans. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 244 Democratic Citizenship. This is a seminar in which students will discuss and analyze the rights and responsibilities of citizenship and the importance and relevance of politics, government, and public policy. The course includes a service learning component. 3 semester hours.

PLSC 245 Campaigns, Elections and Political Behavior. An analysis of individual and group political behavior within the context of the U.S. election system. Emphasis is placed on the nature of campaigns and the impact of elections on government. Class features student projects on campaign tactics and strategy. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 247 Politics and Religion in the United States and beyond. In this course we will examine the intersection of religion and politics from both a domestic and comparative perspective, including contemporary debates about political identities, secularization, modernization, culture, conflict and collaboration. Religious institutions will be evaluated as potential vehicles for citizen discourse and mobilization; we will also assess the broader impact of religion in the public square. Emphasis will be on domestic American politics, but many of these phenomena will also be considered from a comparative perspective. Pre-requisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 248 American Politics: Pressure Groups and Parties. The role of pressure groups and political parties and their impact upon the American political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.
PLSC 251  Introduction to Public Policy. This course serves as an introduction to the policy-making process, covering the various institutions, actors, and procedures involved in getting an idea for solving a policy problem adopted into law and implemented. The themes discussed may be relevant at the local, state, or national levels, and may include, but not limited to, such matters as health, education, environmental, and fiscal policy issues. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 255  Environmental Politics. The politics of environmental protection and regulation in the United States and selected other states. Prerequisite: PLSC 103, 105, 205, or 210, or Environmental Science Major. 3 semester hours.

PLSC 260  Politics and Film. A study of political themes as they appear in film and the use of film for political purposes. Specific topics vary. Periodically. 3 semester hours. Typically offered Periodically.

PLSC 291  Topics. A study of selected matter in the discipline of political science. Recent topics have included Politics of Western Europe, Politics of Soviet Union. Prospective topics may include Politics on Latin America, Politics of Southeast Asia, Politics of Sub-Sahara Africa, and Feminist Politics. Prerequisite: PLSC 103, 105, 205, or 210. 1-3 semester hours. Course Repeatable. Maximum number of units allowed 99.

PLSC 295  Independent Study. Course work in political science in which the student in cooperation with one of the faculty members, designs the course in some area of political science of interest to the student. 3 semester hours. Consent Required.

PLSC 296  Elections and Civic Responsibility. This seminar will examine the critical role citizens play in American constitutional democracy. Emphasis will be on state and federal elections in Illinois and the importance of voting rights and political participation. Students will be familiarized with Illinois election laws, voter registration requirements and the supervision of elections by state and local authorities. Guest speakers will include representatives from the DuPage Election Commission, who will outline the legal qualifications for becoming a qualified election judge and the Commission's role in guaranteeing the integrity of the electoral process. As a central requirement, of the course, students will complete the certification process to become election judges and will serve in that capacity on Election Day. Additional component: Certification to become an election judge and working a precinct on election day. 1 semester hour.

PLSC 297  Internship. Federal, state, and local government institutions in the area serviced by the university offer opportunities for interested students to gain practical experience in governmental offices. Prerequisite: Junior or senior standing. 3 semester hours.

PLSC 299  Research Methods in Political Science. An analysis of the various theoretical approaches to the study of social sciences as well as discussion and completion of a scientific research design. Prerequisite: Senior Standing; a grade of "C" or better in PLSC 103, 201, 210, and 105 or 205; a grade of "C" or better in a least one 300 level PLSC elective. 3 semester hours.

PLSC 313  American Foreign Policy. This course offers an overview of recent American Foreign policy and concentrates on both international and domestic pressures placed on foreign policy leaders. Students will participate in decision situations and debate policy options. Prerequisite: PLSC 103. 3 semester hours.
PLSC 316 Genocide: The Politics of Hate, Fear, Terror and Power. This is a survey course on genocide, one of the most controversial and deadly concepts in all of contemporary politics. We will learn how hate, fear, terror and power have repeatedly converged to produce the most deadly crime humanity has yet conceived. Genocide -- against Armenians in Turkey, The Holocaust, Cambodia's Killing Fields, Bosnia-Herzegovina, Rwanda, Kosovo, and Darfur -- has been a repeated policy used by murderous regimes of many types over the last 100 years. We will study these cases, and the general concept of genocide, in the context of basic themes from the Political Science fields of international relations, comparative politics, and foreign policy studies. No pre-existing knowledge of or exposure to any of these areas is assumed or necessary. Pre-requisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 317 Revolutions and Political Violence. Analyzes theories of revolution and studies a variety of 20th century revolutions. Also considers concepts of terrorism, guerilla warfare and nonviolent revolution. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 318 Nationalism and Terrorism. This course applies theoretical and analytical tools from the fields of International Relations and Comparative Politics in an attempt to understand the two most serious threats of global security in the post-Cold War world - nationalism and terrorism. Most of the death due to political violence in recent years has been directly or indirectly linked to nationalist movements of terrorist methods. It is critical that citizens in democratic states be informed on these matters, to understand what they are and are not, in order to be responsible citizens. Periodically. Pre-requisite: PLSC 103, 105, 205, or 210. 3 semester hours. Typically offered Periodically.

PLSC 319 International Political Economy. Examines the politics of international economics and, to a lesser extent, the economic determinants of international politics. Every other year. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 322 Russian Politics in Comparative Perspective. Analyzes the politics, economics, and social changes of post-communist states, comparing Russia's post-communist experience with that of other states in the Former Soviet Union and Eastern Europe. The fundamental focus of all discussions and readings is on the requirements of and obstacles to the creation of a democratic political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 324 Democracy & Democratization. Examines the theory and practice of democracy around the world, and the question of "transitions to democracy" through analysis of the problems of creating a democratic political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 330 US Constitutional Law I. A study of the Constitution as a living and changing document underlying our entire system of government; the role played by the judiciary in developing Constitutional law. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 331 Constitutional Law II. A study of the Constitution as a living and changing document underlying our entire system of government; the role played by the judiciary in developing Constitutional law. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 336 Women in the Law. This course introduces students to basic concepts in the history and development of feminist thought while applying the knowledge to actual cases and legal situations affecting women. By examining the various controversies and problems that pervade this aspect of politics, students will achieve a greater awareness of how the American legal system helps to shape issues relating to gender. Spring, even years. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours. Typically offered Spring Term, Even Years.
PLSC 341 Presidential and Congressional Politics. Study of the American presidency: the background, powers, and relations with the other components of the political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 342 Congress and the Legislative Process. Concentrates on the whole spectrum of the legislative process in the United States. Features simulation of the US House. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 343 American Political Thought. Analyzes major American political theorists and the effects their thoughts have had on structuring our governmental institutions and shaping the political values and behavior of Americans. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 344 Democratic Citizenship. This is a seminar in which students will discuss and analyze the rights and responsibilities of citizenship and the importance and relevance of politics, government, and public policy. The course includes a service learning component. 3 semester hours.

PLSC 345 Campaigns, Elections and Political Behavior. An analysis of individual and group political behavior within the context of the US election system. Emphasis is placed on the nature of campaigns and the impact of elections on government. Class features student projects on campaign tactics and strategy. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 347 Politics and Religion in the United States and beyond. In this course we will examine the intersection of religion and politics from both a domestic and comparative perspective, including contemporary debates about political identities, secularization, modernization, culture, conflict and collaboration. Religious institutions will be evaluated as potential vehicles for citizen discourse and mobilization; we will also assess the broader impact of religion in the public square. Emphasis will be on domestic American politics, but many of these phenomena will also be considered from a comparative perspective. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 348 American Politics: Pressure Groups and Parties. The role of pressure groups and political parties and their impact upon the American political system. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 351 Introduction to Public Policy. This course serves as an introduction to the policy-making process, covering the various institutions, actors, and procedures involved in getting an idea for solving a policy problem adopted into law and implemented. The themes discussed may be relevant at the local, state, or national levels, and may include, but not limited to, such matters as health, education, environmental, and fiscal policy issues. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.

PLSC 354 Seminar on International Theories. An advanced study of the main and latest theories and issues in international relations. 3 semester hours.

PLSC 355 Environmental Politics. The politics of environmental protection and regulation in the United States and selected other states. Prerequisite: PLSC 103, 105, 205, or 210, or Environmental Science Major. 3 semester hours.

PLSC 391 Topics. A study of selected matter in the discipline of political science. Recent topics have included Politics of Western Europe, Politics of Soviet Union. Prospective topics may include Politics of Latin America, Politics of Southeast Asia, Politics of Sub-Saharan Africa, US-Asian Relations, Politics of Policy change in America. Prerequisite: PLSC 103, 105, 205, or 210. 3 semester hours.  Course Repeatable. Maximum number of units allowed 99.
PLSC 392 Political Leadership. Intensive study of the principles and practice of the politics of leadership including hands-on leadership experiences in conjunction with the professor. 3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 12.

PLSC 395 Independent Study. Course work in political science in which the student in cooperation with one of the faculty members, designs the course in some area of political science of interest to the student. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 99.

PLSC 397 Internship. Federal, state, and local government institutions in the area serviced by the university offer opportunities for interested students to gain practical experience in governmental offices. Prerequisite: Junior or senior standing. 1-3 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 3.


Psychology

PSYC 100 Survey of Psychology. Overview of the field; principles and general methodology; concepts, theories and research, applicability to modern living. Each semester. IAI S6 900. 3 semester hours. Psychology Core Elective.

PSYC 150 Introduction to Statistics. Basic course in statistical techniques which includes measures of central tendency, probability, sampling, estimation and hypothesis testing. For non-business majors. Each semester. IAI M1 902. Prerequisite: "C" or better in MATH 105 or MATH 110. 3 semester hours.


PSYC 200 Childhood and Adolescence. Behavioral and social analysis of human development from birth through adolescence. Annually. IAI S6 904. Prerequisite: PSYC 100 3 semester hours.

PSYC 202 Adulthood and Aging. Biopsychological, psychosexual and social cognitive development from young adulthood through aging, to dying and death. IAI S6 905. Annually. Prerequisite: PSYC 100 3 semester hours.

PSYC 204 Survey of Exceptional Children. Discussion of atypical development: characteristics of persons labeled as having mental retardation, learning disabilities, behavioral disabilities, sensory deficits, speech disorders and health/physical challenges. Diagnosis, referral, educational strategies and legal implications are reviewed. Each semester. Cross referenced with PSYC 204. IAI ECE 913; IAI SED 904. 3 semester hours.

PSYC 210 Social Psychology. How social influences affect the individual and group. Attitudes, attribution and prejudice. Each semester. IAI S8 900. PSYC 210 and SOCL 210 are cross-listed. 3 semester hours. Psychology/Sociology Core Elec. Typically offered Fall and Spring Terms.
PSYC 220  Personality.  Theories of personality; process and analysis of personality development and adjustment and discussion of the influence of theories on the practice of psychotherapy. Fall. Prerequisite: PSYC 100. 3 semester hours. Typically offered Fall Term.

PSYC 241  Educational Psychology.  Survey of theories of classroom learning processes including human growth and development, evaluation, the exceptional child and the disadvantaged child. Emphasis also on the developmental characteristics and nature and needs of the early adolescent. Cross-referenced with PSYC 241. Each semester. IAI SED 902. 3 semester hours. Typically offered Fall, Spring, and Summer Terms.

PSYC 245  Alcohol Problems and Alcoholism.  Introductory course regarding the effects of alcoholism on the individual, family and society. Examines concerns related to the identification, treatment and prevention of alcoholism in the United States. Annually. 3 semester hours.

PSYC 250  Basic and Applied Statistics.  Acquaints students with descriptive statistical techniques (including measures of central tendency and variability, correlation, regression and large and small sample estimation) as well as inferential statistical procedures (t, z and ANOVA designs, nonparametric tests and multiple regression). Focus will be on how these statistical procedures can be directly applied to real-life situations. Prerequisite: MATH 105, MATH 108 or Math 110. 3 semester hours. Typically offered Annually.

PSYC 251  Statistics II.  ANOVA designs, correlation, regression, non-parametric tests, survey and experimental research techniques, social and behavioral measurements and multivariate analysis. Each semester. Prerequisite: PSYC 150 or SOCL 150 or CJUS 150. Fee: $35 3 semester hours.

PSYC 252  Research Practicum.  Goal of the course is to develop the student's research skills in a particular field (Psychology, Sociology or Criminal Justice) by involving him/her in an actual research project under the direction of a faculty member. Students will meet with the instructor on a regular basis and will write both a preliminary proposal and final paper in APA style, the latter to include identification of the subject of the study, a review of the literature, statement of a working hypothesis, construction of necessary operational definitions, delineation of variables, a description of the population (and sample) and statistical tests if appropriate. Pre-requisite: Successful completion of basic skills courses and instructor consent. Offered each term. 3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required.

PSYC 291  Selected Topics.  Relevant to the needs and interests of the psychology major. Periodically. 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.

PSYC 292  Psychology of Horror Films.  Carl Jung’s archetypal theory will be applied to horror films (from silent to contemporary) to better understand why people are drawn to this genre. Summer. Prerequisite: PSYC 100. 3 semester hours. Typically offered Summer Term.

PSYC 298  Research Methods.  Completion of the first part of an original research design. Pre-requisite: PSYC 250 and admission into the Adult BA in Organizational Leadership Program. 3 semester hours.

PSYC 300  Abnormal Psychology.  Dynamics of personality disorders, etiology, diagnosis, treatment and prognosis in neurotic and psychotic behavioral disorders. Discussion of case studies. Each semester. Prerequisite: PSYC 100 and Junior/Senior status. 3 semester hours.
PSYC 302  Psychotherapy.  Survey of theories and techniques of individual and group psychotherapies. Concepts and methods of evaluating therapeutic interventions. Fall. Prerequisite: PSYC 300.  3 semester hours. Typically offered Fall Term.

PSYC 310  Social, Psychological, and Cultural Aspects of Aging.  This course examines various psychological and sociological aspects which impact the aging process.  An analysis of the individual and society, changes in social roles and status, intergenerational relationships, sociocultural differences, and intrapsychic dynamics will be explored.  3 semester hours. Psychology Core Elective.

PSYC 314  Learning and Cognition.  Lecture course on principles, theories, concepts and experimental literature in learning and cognition, with emphasis on human learning in educational settings. Periodically. Pre-req: PSYC 100, PSYC 251.  3 semester hours. Typically offered Periodically.

PSYC 315  Learning and Cognition Lab.  Utilizes a series of computer simulation / experimental techniques to illustrate recall difference in attention, learning and memory. Lab reports in APA Style are required. Prerequisite: Co-registered in PSYC 314.  1 semester hour.

PSYC 316  Sensation and Perception.  Lecture analysis of the role of the senses in appreciating the external world; mechanisms of sensation and perception; introduction to psychophysical measurement of thresholds and signal detection theory. Periodically. Prerequisite: PSYC 100, PSYC 251.  3 semester hours. Typically offered Periodically.

PSYC 317  Sensation and Perception Lab.  Utilizes a series of computer simulation / experimental techniques to illustrate how we perceive information as a function of the senses, threshold detention and other measures are employed. Lab reports in APA Style are required. Prerequisite: Co-registered in PSYC 316.  1 semester hour.

PSYC 318  Physiological Psychology.  Lecture relating neurophysiological correlates of human and animal behavior, emphasizing motivation, emotion, learning and memory processes. Annually. Prerequisite: PSYC 100 and Junior or Senior standing.  3 semester hours.

PSYC 319  Physiological Psychology Lab.  Utilizes a series of computer simulation / experimental techniques to illustrate important physiological mechanisms(e.g., visual and auditory processing). Lab reports in APA Style are required. Prerequisite: Co-registered in PSYC 318.  1 semester hour.

PSYC 320  Organizational Behavior.  Overview of organizational structures and group dynamics. Examines job satisfaction, motivation, performance evaluation, decision-making and goal setting. Each semester.  3 semester hours. Typically offered Fall, Spring, and Summer Terms.

PSYC 350  Systems and Theories.  Historical antecedents of modern psychology; current theoretical systems. Spring. Prerequisite: Junior, senior in PSYC/SOCL program.  3 semester hours. Typically offered Spring Term.

PSYC 351  Research Methods in the Social Sciences.  An analysis of various theoretical approaches to the study of social sciences as well as discussion and completion of the first two chapters of an original research design. Each semester. Prerequisite: PSYC 251 or SOCL 251 or CJUS 251. Fee: $35  3 semester hours. Writing Intensive Course. Typically offered Fall and Spring Terms.
PSYC 354 Behavior Modification/Lab. Focuses on basic behavioral principles and procedures. Emphasis is on the use of non-aversive techniques and applications with special needs populations. Requires lab work off campus. Annually. Prerequisite: Junior, senior in PSYC/SOCL program. 4 semester hours.

PSYC 356 Clinical Practicum/Lab. Focus is on teaching interpersonal and primary-level skills of empathy, listening, and interviewing to the introductory-level helping professional. Each semester. Prerequisite: Junior or Senior in PSYC/SOCL program. 4 semester hours. Typically offered Fall and Spring Terms.

PSYC 358 Group Dynamics Lab. A process-experimental course in how to conduct training in interpersonal skills and how to engage in organizational development activities. Weekend format only. Annually. 4 semester hours.

PSYC 371 Death and Dying. Dynamics of the grief process, the care of the terminally ill and the needs of survivors in the sociological and psychological context of death. Annually. 3 semester hours. Typically offered Annually.

PSYC 373 Group Processes. Introduces theory and components of group process. Opportunities to participate in functioning groups for decision making and practicing of newly developed skills. Annually. Prerequisite: SOCL-356 3 semester hours. Typically offered Annually.

PSYC 386 Professional Issues in Life Span Services. This course presents an overview of gerontology as a profession. Special attention is given to ethical issues. The course reviews contemporary settings in the field of aging and analyzes the status of gerontology in terms of the occupation as a human service provider. Periodically. 3 semester hours.

PSYC 389 Organizational Leadership Capstone. Completion of an original research design. Prerequisite: PSYC 299; Admission to the Adult BA in Organizational Leadership Program. Each term. 3 semester hours. Typically offered Fall and Winter Terms.

PSYC 391 Topics. Relevant topics according to the needs and interests of psychology majors. Periodically. 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.

PSYC 395 Senior Thesis. Completion of an original research project under faculty supervision, involving either an original survey design, case study, or experimental analysis. Prerequisite: PSYC 351 or SOCL 351 or CJUS 351. 3 semester hours. Consent Required.

PSYC 397 Psychology Field Placement. Supervised instruction in an on- or off-campus setting related to student’s interest in psychology. Each semester. Prerequisite: PSYC-356, and a G.P.A. of 2.5 or better, Consent of department chair and field placement director prior to the 10th week of the semester preceding the field placement. 3-6 semester hours. Consent Required. Course Repeatable. Maximum number of units allowed 6.

PSYC 398 Life Span Services Field Placement. Supervised experience in an off-campus assisted/independent living setting. Each semester. Prerequisite: SOCL-356, and a G.P.A. of 2.5 or better, consent of the program director and field placement director prior to the 10th week of the semester preceding field placement 3-6 semester hours. Consent Required.

PSYC 399 Independent Study. Provides opportunity for advanced majors to complete requirements of psychology course on their own. Periodically. Prerequisite: Mutual consent of instructor and program director. 3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.
Public Health

PUH 135 Mental Health First Aid. This course will provide students the opportunity to learn basic concepts and strategies of a mental health first- aider including the ability to identify, understand, and respond to signs of mental illnesses and substance use disorders. 1 semester hour. Typically offered Spring Term.

Radiation Therapy

RADT 330 Introduction to Technical Radiation Oncology. Technical provides the student therapist with the technical aspects of radiation therapy. Discussion will include orientation to the function and operation of radiation therapy equipment. 2 semester hours.

RADT 331 Principles and Practice of Radiation Therapy I. Content is designed to provide an overview of cancer and the specialty of radiation therapy. The medical, biological, and pathological aspect as well as the physical and technical aspects will be discussed. The roles and responsibilities of the radiation therapist, the treatment prescription, the documentation of treatment parameters and delivery will also be discussed. 3 semester hours.

RADT 332 Pathology. The course content is presented in two parts: general pathology and neoplasia. General pathology introduces basic disease concepts, theories of disease causation and system-by-system pathophysiologic disorders most frequently encountered in clinical practice. Neoplasia provides an in-depth study of new and abnormal development of cells. The processes involved in the development and classification of both benign and malignant tumors and site-specific information on malignant tumors is presented. The sectional anatomy content is designed to study normal sectional anatomy via diagrams and radiologic images. 2 semester hours.

RADT 333 Radiation Physics. Content is designed to establish a basic knowledge of physics pertinent to developing an understanding of radiations used in the clinical setting. Fundamental physical units, measurements, principles, atomic structure, and types of radiation emphasized. Also presented are the fundamentals of x-ray generating equipment, x-ray production, and its interaction with matter. 2 semester hours.

RADT 334 Clinical Practicum I. Content is designed to provide sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development shall be discussed, examined, and evaluated. This includes supervised clinical education, which offers a sufficient and well-balanced variety of radiation treatments, examinations, and equipment. Various rotations include: three general radiation therapy treatment rooms, Simulator/CT simulator, Nursing Department, and Physics/Dosimetry Department. 3 semester hours.

RADT 335 Medical Imaging. Content is designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning, and treatment verification in radiation oncology. Radiation oncology imaging equipment and related devices will be emphasized. Procedure for imaging human structure and their relevance to radiation therapy; topographical anatomy, radiographic and cross sectional anatomy. Identification of anatomic structures as demonstrated through various imaging modalities. 2 semester hours.
RADT 336 Introduction to Radiologic Sciences. Content is designed to provide students with an overview of the foundations, concepts, history and theories in radiation therapy and the practitioner's role in the health care delivery system. The interrelatedness of standards of care, law, ethical standards and competence will be examined. Radiation Therapy patient care content will provide the student with concepts and competencies in assessment and evaluation of the patient for service delivery. Psychological and physical needs and factors affecting treatment outcome will be presented and examined. Routine and emergency care procedures will be presented. 2 semester hours.

RADT 337 Radiation Safety and Protection. Content is designed to present basic principles of radiation protection and safety for the radiation therapist. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and health care organizations are incorporated. Specific responsibilities of the radiation therapist are discussed, examined, performed and evaluated. 2 semester hours.

RADT 338 Principles and Practice of Radiation Therapy II. Content is designed to examine and evaluate the management of neoplastic disease using knowledge in arts and sciences, while promoting critical thinking and the basics of ethical decision making. The epidemiology, etiology, detection, diagnosis, patient condition, treatment, and prognosis of neoplastic disease will be presented, discussed, and evaluated in relationship to histology, anatomical site, and patterns of spread. The radiation therapist's responsibility in the management of neoplastic disease will be examined and linked to the skills required to analyze complex issues and make informed decisions while appreciating the character of the profession. 3 semester hours.

RADT 339 Technical Radiation Oncology II. Technical provides the student therapist with the technical aspects of radiation therapy. Discussion will include modalities of treatment and the distinctive properties of each patient setup consideration. This will also include basic hand calculations. 2 semester hours. Consent Required.

RADT 340 Radiation Therapy Physics. Content is designed to review and expand concepts and theories in the radiation physics course. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production, and interactions of ionizing radiation are emphasized. Also presented are treatment units used in external radiation therapy, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution, and scatter analysis. Content is designed to establish factors that influence and govern clinical planning of patient treatment. Encompassed are isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams. 2 semester hours.

RADT 341 Quality Management. Content is designed to focus on the evolution of quality management (QM) programs and continuing quality improvement in radiation oncology. Topics will include the need for the various types of evaluations and tests performed on simulators, megavoltage therapy equipment, and therapy planning units; the role of radiation therapists in quality management programs; legal and regulatory implications for maintaining appropriate guidelines as well as the role computers and information systems serve within the radiation oncology department. 2 semester hours.

RADT 342 Operational Issues in Radiation Therapy. Content is designed to focus on various radiation therapy operational issues. Continuing Quality Improvement project development and evaluation and assessment techniques will be emphasized. Human resource issues and regulations impacting radiation therapists will be examined. Accreditation agencies and the radiation therapist's role in the accreditation process will be emphasized. Billing and reimbursement issues pertinent to the radiation therapy department will be presented. 2 semester hours.

RADT 343 Clinical Practicum II. Continuation of Clinical Practicum I. 2 semester hours.
RADT 344   Management and Methods of Patient II.  Continuation of RADT 336 Management and Methods of Patient Care I.  2 semester hours.

RADT 345   Radiation Biology.  Content is designed to present basic concepts and principles of radiation biology. The interactions of radiation with cells, tissues, and the body as a whole and resultant biophysical events will be presented. Discussion of the theories and principles of tolerance dose, time-dose relationships, fractionation schemes, and the relationship to the clinical practice of radiation therapy will be discussed, examined, and evaluated.  2 semester hours.

Religious Studies


RELS 105   New Testament Greek I.  Beginners introduction to the grammar and vocabulary of the original Greek text.  3 semester hours.

RELS 106   New Testament Greek II.  Continuation of RELS 105. Prerequisite: RELS 105  3 semester hours.

RELS 110   Ecclesiastical Latin I.  A year-long introduction to the grammar and vocabulary needed to read the Latin of St. Jerome's Vulgate, liturgical and Medieval scholastic texts. Equivalent to 4 years of high school Latin.  3 semester hours.

RELS 111   Ecclesiastical Latin II.  Continuation of RELS 110. Prerequisite: RELS 110  3 semester hours.


RELS 122   The Baptism of Europe.  Studies the development and Christianization of Europe in the Middle Ages (500-1500 A.D.). Drawing upon the resources of the Catholic and Benedictine traditions, the course explores the theme of "person in community" through social structures (religious, political, economic) and through the interactions and/or conflicts between people and cultures (Eastern and Western Christianity; Christianity, Judaism, Islam). IAI H9 900.  3 semester hours.


RELS 140   World Religions.  An introduction to the religious teachings and practices of the major monotheistic and polytheistic religions of the world and their cultural impact. Periodically.  3 semester hours. Religious Studies Core Elect. Typically offered Periodically.
RELS 145  Women in the Sacred Scriptures.  An exploration of the literature of the Scriptures of Jewish and Christian believers as well as the Scriptures of other world religions, specifically the literature which emphasizes women's faith or women's experience. Confronted with a host of literary role models in Sacred Scripture, women and men will have the opportunity to explore to what extent, if any, women models are worthy of emulation or assist in deepening their present Spirituality.  3 semester hours. Religious Studies Core Elect. Typically offered Fall and Spring Terms.

RELS 150  Introduction to the Bible I.  A reading of selections from the Christian Bible designed to deal with the historical background, literary composition, and general content of the books of the Hebrew Bible and the New Testament. Periodically. IAI H5 901.  3 semester hours. Religious Studies Core Elect. Typically offered Periodically.

RELS 151  Introduction to the Bible II.  Continuation of RELS 150. Prerequisite: RELS 150.  3 semester hours.


RELS 160  Jesus Christ.  Studies the images of Jesus Christ in the New Testament and the development of Christological doctrine in subsequent Christian thought. Fall, even years.  3 semester hours. Religious Studies Core Elect. Typically offered Fall Term, Even Years.

RELS 165  The Church.  Investigates the apostolic origin, development, and theological understanding of the Christian community up to the present. Spring, odd years.  3 semester hours. Religious Studies Core Elect. Typically offered Spring Term, Odd Years.

RELS 170  Early Christianity.  Examines the first six centuries of doctrinal developments, spiritual life and morality, relations between Christianity and other religious movements, and the church and state. Periodically.  3 semester hours. Religious Studies Core Elect. Typically offered Periodically.

RELS 180  The Divine Economy.  A classic religious expression for bringing creation to full health is the unfolding of the drama of "divine economy" (oikonomia tou Theou), one mark of which is shared abundance. Fall, spring.  3 semester hours. Religious Studies Core Elect. Typically offered Fall and Spring Terms.

RELS 191  Selected Topics.  Special topics on the introductory level. Fall and spring. A topics course may apply toward divisional core. 1-3 semester hours. Religious Studies Core Elect. Typically offered Fall and Spring Terms.  Course Repeatable. Maximum number of units allowed 99.

RELS 220  History of Christian Thought I.  This overview of the Christian intellectual tradition studies the history of reflection on Christian faith from the first through the fifteenth century, as seen in the writings of representative figures. Fall, odd years.  3 semester hours. Religious Studies Core Elect. Typically offered Fall Term, Odd Years.

RELS 221  History of Christian Thought II.  This overview of the Christian intellectual tradition studies the history of reflection on Christian faith from the sixteenth century to the present, as seen in the writings of representative figures. Spring, even years.  3 semester hours. Religious Studies Core Elect. Typically offered Spring Term, Even Years.

RELS 225  Religion & Natural Sciences.  3 semester hours. Religious Studies Core Elect.
RELS 230 Judaism. Introduction to the main beliefs and practices of Judaism and the history of the Jewish people. The Herbert Portes Scholar in Residence Course in Judaism. Spring. 3 semester hours. Religious Studies Core Elect. Typically offered Spring Term.

RELS 235 Islam. Study of the belief system, ritual, ethos and social organization of Islam, with attention to outstanding passages of the Qur'an. Co-sponsored by the Islamic Foundation of Villa Park. Fall. 3 semester hours. Relig Stud & Multi-Cultural. Typically offered Fall Term.


RELS 251 Christianity in Latin America. Examines the cultural, historical and religious traditions of Latin America and the impact of social change on religious beliefs and practices in the region. 3 semester hours.


RELS 270 Roman Catholicism. Survey of Roman Catholic teachings, ethical principles, sacramental rituals, and structural organization. 3 semester hours.

RELS 271 19th Century Church History. Studies the European Church's reaction to the French Revolution and scientific theories and the social questions of the 19th century. Analyzes the roots of contemporary developments in the church. 3 semester hours.

RELS 272 20th Century Church History. Analyzes the impact of 19th century developments, the world wars, decolonization, intellectual trends, and Vatican II's origins and results. 3 semester hours.

RELS 275 Protestantism. Survey of the fundamental principles of Protestant teaching as rooted in the German, Swiss, and English Reformations. 3 semester hours. Religious Studies Core Elect.

RELS 285 Religion in America. Study of the prominent individuals, communities, movements, institutions and beliefs which make up the religious experience of North American people. Fall. IAI H5 905. 3 semester hours. Religious Studies Core Elect. Typically offered Fall Term.


RELS 350 Christian Ethics. An understanding of the distinctively Christian strategy of life based on readings of Christian scriptures and theological interpretations. 3 semester hours.
RELS 385  Religion In America. Study of the prominent individuals, communities, movements, institutions and beliefs which make up the religious experience of North American people. 3 semester hours.

RELS 391  Selected Topics. Special topics on the advanced level. 3 semester hours. Course Repeatable. Maximum number of units allowed 99.

Sociology

SOCL 100  Principles of Sociology. Fundamental concepts in the scientific study of human society, culture and personality, with special study of the social organization of groups and institutions. Each semester. IAI S7 900. 3 semester hours. Sociology Core Elective. Typically offered Fall and Spring Terms.

SOCL 150  Introduction to Statistics. Basic course in statistical techniques which includes measures of central tendency, probability, sampling, estimation and hypothesis testing. For non-business majors. Each semester. IAI M1 902. Prerequisite: "C" or better in MATH 105 or MATH 110. 3 semester hours. Typically offered Fall and Spring Terms.

SOCL 195  Research Practicum. Participation in on-going departmental research. Each semester. Prerequisite: Consent of department chair required. 1-3 semester hours. Typically offered Fall and Spring Terms. Consent Required.

SOCL 205  Racial and Ethnic Groups. The nature of prejudice. Studies of ethnic relations in America and other societies. Spring. IAI S7 903D. 3 semester hours. Typically offered Spring Term.

SOCL 210  Social Psychology. How social influences affect the individual and group. Attitudes, attribution and prejudice. Each semester. IAI S8 900. PSYC 210 and SOCL 210 are cross-listed. 3 semester hours. Psychology/Sociology Core Elec. Typically offered Fall and Spring Terms.

SOCL 213  Health Aspects of Aging. Focuses upon the normal aging process in American Society including biological, psychological and health aspects. Emphasis is placed on health services, health maintenance, and contemporary issues with respect to the elderly population. 3 semester hours. Life Science Core Elective.

SOCL 220  Community Studies. Examination of selected works on urban, suburban, and rural communities; their social structures, institutions, and patterns of human relationships. Human Ecology, change, and future projections. 3 semester hours.

SOCL 231  Medical Sociology. Analysis of social factors in relation to health and disease. Organization of health professions and institutions. Periodically. Prerequisite: SOCL 100. 3 semester hours. Sociology Core Elective. Typically offered Periodically.

SOCL 234  Sociology of Sport. Examines social and cultural factors affecting organized sport, including gender, race, the role of money and media coverage in athletics, and the importance of athletics to small communities. 3 semester hours.

SOCL 235  Sociology of Popular Culture. Studies the role of popular culture in communicating ideas about society, including deviance, gender, social class, and race. Examples that will be studied include films, tattoos and body piercing, and myths, legends, and popular fiction. 3 semester hours.
SOCL 240 Social Problems. Effects of social change, disorganization and value conflict on family life, mental health, ethnic relations, crime and delinquency, related topics. Spring. IAI S7 901. Prerequisite: SOCL 100. 3 semester hours. Typically offered Spring Term.

SOCL 245 Alcohol Problems and Alcoholism. Introductory course regarding the effects of alcoholism on the individual, family and society. Examines concerns related to the identification, treatment and prevention of alcoholism in the United States. Annually. 3 semester hours.

SOCL 250 Basic and Applied Statistics. Acquaints students with descriptive statistical techniques (including measures of central tendency and variability, correlation, regression and large and small sample estimation) as well as inferential statistical procedures (t, z and ANOVA designs, nonparametric tests and multiple regression). Focus will be on how these statistical procedures can be directly applied to real-life situations. Prerequisite: MATH 105, MATH 108 or Math 110. 3 semester hours. Typically offered Annually.

SOCL 251 Statistics II. ANOVA designs, correlation, regression, non-parametric tests, survey and experimental research techniques, social and behavioral measurements and multivariate analysis. Each semester. Prerequisite: PSYC 150 or SOCL 150 or CJUS 150. Fee: $35 3 semester hours.

SOCL 252 Research Practicum. Goal of the course is to develop the student's research skills in a particular field (Psychology, Sociology or Criminal Justice) by involving him/her in an actual research project under the direction of a faculty member. Students will meet with the instructor on a regular basis and will write both a preliminary proposal and final paper in APA style, the latter to include identification of the subject of the study, a review of the literature, statement of a working hypothesis, construction of necessary operational definitions, delineation of variables, a description of the population (and sample) and statistical tests if appropriate. Pre-requisite: Successful completion of basic skills courses and instructor consent. Offered each term. 3 semester hours. Typically offered Fall, Spring, and Summer Terms. Consent Required.

SOCL 260 Introduction to Criminal Justice. Examination of the criminal justice system: police, courts and corrections. Analysis of functions, jurisdiction, operation and relationships. Annually. IAI CRJ 901. 3 semester hours.

SOCL 265 Introduction to Social Work. Values and history that underlie social work issues; discussion of the profession of social work and its concern with human welfare areas and field of service. 3 semester hours. Typically offered Fall Term.

SOCL 270 Marriage and the Family. Family system and its changing relationships to contemporary society. Structures, value orientation and personality patterns, role and status interrelationships. Annually. IAI S7 902. Prerequisite: SOCL 100. 3 semester hours. Typically offered Annually.

SOCL 290 Social and Cultural Change. Analysis of large scale historical change, the succession of types of societies and the emergence of the contemporary world. Evolution of social institutions (the family, religion) and speculation about significant future change. Annually. 3 semester hours. Typically offered Annually.

SOCL 291 Selected Topics in Sociology. According to the interests of the sociology majors. Periodically. 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.
SOCL 301  Social Welfare Services. Survey of social work agencies. Application of social systems to public and voluntary social welfare services. Annually. Prerequisite: SOCL 265. 3 semester hours. Typically offered Annually.

SOCL 306  Correctional System. Theory and research relating to treatment, incarceration and rehabilitation of the offender. Annually. IAI CRJ 911. Prerequisite: SOCL/CJUS 260. 3 semester hours. Typically offered Annually.

SOCL 310  Social, Psychological and Cultural Aspects of Aging. This course examines social, psychological and cultural aspects that impact the aging process. An analysis of the individual and society, explorations of changes in roles and status, intergenerational relationships, sociocultural differences and intrapsychic dynamics will be explored. Fall. 3 semester hours.


SOCL 350  Social Theory. Origin and development of sociology through a study of the classic works of the 19th and 20th centuries. Fall. Prerequisite: SOCL 100 3 semester hours. Typically offered Fall Term.

SOCL 351  Research Methods in the Social Sciences. An analysis of various theoretical approaches to the study of social sciences as well as discussion and completion of the first two chapters of an original research design. Each semester. Prerequisite: PSYC 251 or SOCL 251 or CJUS 251. Fee: $35 3 semester hours. Writing Intensive Course. Typically offered Fall and Spring Terms.

SOCL 356  Clinical Practicum/Lab. Focus is on teaching interpersonal and primary-level skills of empathy, listening, and interviewing to the introductory-level helping professional. Each semester. Prerequisite: Junior or Senior in PSYC/SOCL program. 4 semester hours. Typically offered Fall and Spring Terms.

SOCL 371  Death and Dying. Dynamics of the grief process, the care of the terminally ill and the needs of survivors in the sociological and psychological context of death. Annually. 3 semester hours. Typically offered Annually.

SOCL 386  Professional Issues in Life Span Services. This course presents an overview of gerontology as a profession. Special attention is given to ethical issues. The course reviews contemporary settings in the field of aging and analyzes the status of gerontology in terms of the occupation as a human service provider. Periodically. 3 semester hours.

SOCL 390  Criminal Justice Field Placement. Observation and participation in the daily work of a criminal justice agency. Each semester. Prerequisite: PSYC 356 or SOCL 356, consent of program director and field placement director prior to the 10th week of the semester preceding the field placement, and a G.P.A. of 2.5 or better. 3-6 semester hours. Typically offered Fall and Spring Terms. Consent Required.

SOCL 391  Topics in Sociology. Relevant topics according to the needs and interests of the criminal justice students. Periodically. Prerequisite: SOCL 100. 3 semester hours. Typically offered Periodically. Course Repeatable. Maximum number of units allowed 99.
SOCL 392 Social Work Field Placement. This internship provides experience in practice in a professional agency under the supervision of a trained practitioner. Each semester. Prerequisite: SOCL 356, Consent of the program director and field placement director prior to the 10th week of the semester preceding the field placement, and G.P.A. of 2.5 or better. 3-6 semester hours. Typically offered Fall and Spring Terms. Consent Required.

SOCL 394 Group Processes. Introduces theory and components of group process. Opportunities to participate in functioning groups for decision making and practicing of newly developed skills. Annually. Prerequisite: SOCL-356 3 semester hours. Typically offered Annually.

SOCL 395 Senior Thesis. Completion of an original research project under faculty supervision, involving either an original survey design, case study, or experimental analysis. Prerequisite: PSYC 351 or SOCL 351 or CJUS 351. 3 semester hours. Consent Required.

SOCL 397 Sociology Field Placement. Supervised experience in an on- or off-campus setting related to the student’s interest in sociology. Each semester. Prerequisite: SOCL 356, Consent of the program director and field placement director prior to the 10th week of the semester preceding the field placement, and G.P.A. of 2.5 or better. 3-6 semester hours. Consent Required.

SOCL 398 Life Span Services Field Placement. Supervised experience in an off-campus assisted/independent living setting. Each semester. Prerequisite: SOCL-356, and a G.P.A. of 2.5 or better, consent of the program director and field placement director prior to the 10th week of the semester preceding field placement 3-6 semester hours. Consent Required.

SOCL 399 Independent Study. Provides opportunity for advanced majors to complete requirements of sociology course on their own. Periodically. Prerequisites: Mutual consent of instructor and department chair. 3 semester hours. Typically offered Periodically. Consent Required. Course Repeatable. Maximum number of units allowed 99.

Spanish

SPAN 101 Elementary Spanish I. Introduction to the basic structure of the language. Designed to enable the student to develop oral proficiency and written skills. Fall and Spring. 3 semester hours. Typically offered Fall and Spring Terms.

SPAN 102 Elementary Spanish II. Introduction to the basic structure of the language. Designed to enable the student to develop oral proficiency and written skills. Fall and spring. 3 semester hours. Typically offered Fall and Spring Terms.

SPAN 201 Intermediate Spanish I. Review of the basic structure of the language. Emphasis on extensive language practice in simulated cultural settings which will enable students to continue to develop their oral and written proficiency. Fall. Prerequisite: SPAN 102 3 semester hours. Typically offered Fall and Spring Terms.

SPAN 202 Intermediate Spanish II. Review of the basic structure of the language. Emphasis on extensive language practice in simulated cultural settings which will enable student to continue to develop their oral and written proficiency. Fall and spring. IAI H1 900. Prerequisite: SPAN 201 or placement. 3 semester hours. Typically offered Fall and Spring Terms.
SPAN 211 Intermediate Grammar and Composition. Comprehensive review and synthesis of Spanish grammar. Designed to provide students with extensive writing practice in order to prepare them for more effective participation in advanced courses, and to enable them to improve their ability to use and manipulate the language with a higher degree of accuracy, flexibility, and assurance. It is highly recommended that it be taken simultaneously with SPAN 212. Fall and spring. Prerequisite: SPAN 202. 3 semester hours. Writing Intensive Course. Typically offered Fall and Spring Terms. Consent Required.

SPAN 212 Intermediate Oral Communications. Emphasis on oral proficiency, syntax, and grammar, as well as helping students to develop their ability to respond to the cultural challenges that face someone living in an Hispanic culture. Fall and spring. Prerequisite: SPAN 211 or concurrent registration in SPAN 211. 3 semester hours. Typically offered Fall and Spring Terms. Consent Required.

SPAN 213 Business Spanish I. Survey of the fundamental concepts of commercial language. Designed to help students improve their oral and written proficiency and cultural sensitivity while developing a vocabulary for business functions. Periodically. Prerequisite: SPAN 211, SPAN 212. 3 semester hours. Typically offered Periodically. Consent Required.

SPAN 214 Business Spanish II. Survey of the fundamental concepts of commercial language. Designed to help students improve their oral and written proficiency and cultural sensitivity while developing a vocabulary for business functions. Periodically. Prerequisite: SPAN 211, SPAN 212. 3 semester hours. Typically offered Periodically. Consent Required.

SPAN 220 Introduction to Spanish Literature. Close reading of selected Spanish short stories, poetry, drama and essays. Analysis of how they reflect and influence the thinking of their times and the relevance of their ideas to the contemporary world. This course is designed to help students improve skills in written and oral narration and description, and reading proficiency. Fall, even years. IAI H3 916. Prerequisite: SPAN 211, SPAN 212. 3 semester hours. Literature Core Elective. Typically offered Fall Term, Even Years. Consent Required.

SPAN 221 Introduction to Contemporary Latin American Literature. Close reading of selected works of Latin American literature including poetry, the novel, drama, and the short story. Students will be exposed to the lives of the authors and their times, as well as the critical role of literature in Latin American social and political development. Emphasis on enabling students to develop skills in written and oral narration and description, and reading proficiency. Fall, odd years. IAI H3 916. Prerequisite: SPAN 211, SPAN 212. 3 semester hours. Literature Core Elective. Typically offered Fall Term, Odd Years. Consent Required.

SPAN 230 Elements of Spanish Civilization & Culture. Designed to allow students to work on development of language proficiency through class discussion and selected readings concerned with key elements in Spanish civilization: the family, church, governmental, and social relations, and how these factors have shaped the artistic, literary, and historic experience of Spanish and Spanish American people. Spring, even years. Prerequisite: SPAN 211, SPAN 212. 3 semester hours. Typically offered Spring Term, Even Years. Consent Required.

SPAN 231 Elements of Latin American Culture. Designed to allow students to work on development of language proficiency through class discussion and selected readings concerned with key elements in Latin American civilization: the family, the church, social, and political movements, and how these factors have shaped the artistic, literary, and historic experience of Latin American peoples. Fall, even years. Prerequisite: SPAN 211, SPAN 212. 3 semester hours. Multi-Cultural Course. Typically offered Fall Term, Even Years.
SPAN 232  Cultural Dynamics of Latin Americans in the United States.  Examines the history, contributions, and problems of various Latin American ethnic groups in the U.S. as they adjust and adapt to North American culture. Especially recommended for Education majors.  3 semester hours. Multi-Cultural Course.


SPAN 294  Spanish Conversation Teaching.  To provide Spanish majors and minors with the opportunity to strengthen proficiency in all skills.  Students work with instructor to prepare and conduct classes, tutor beginning students on an individual basis, and work with assistants in other languages in developing the departmental archive of authentic materials to aid in language instruction. Prerequisite: SPAN 211, SPAN 212.  2 semester hours.  Consent Required.

SPAN 295  Independent Study.  Designed for the intermediate student who wishes to explore an aspect of Spanish language or literature beyond the scope of the regular course offerings. Prerequisite: Department Consent  1-3 semester hours.  Consent Required.  Course Repeatable. Maximum number of units allowed 99.

SPAN 305  Advanced Grammar.  In-depth study of Spanish syntax and grammar.  Strong emphasis on sentence analysis, grammar terminology, translation and word expression acquisition.  Highly recommended for prospective language teachers, but useful for all Spanish majors or minors.  Designed to enable students to improve their ability to use and manipulate the language with a higher degree of accuracy, flexibility and assurance. Fall, odd years. Prerequisite: SPAN 211,SPAN 212.  3 semester hours. Typically offered Fall Term, Odd Years. Consent Required.

SPAN 307  Contemporary Drama in Spain.  Study of representative playwrights.  Discussion of the political, social, economic and religious issues reflected in the plays.  Emphasis on enabling students to develop skills in oral and written analysis, narration and description, as well as to strengthen reading proficiency. Spring, odd years. Prerequisite: SPAN 211 and 212.  3 semester hours. Literature Core Elective. Typically offered Spring Term, Odd Years. Consent Required.

SPAN 310  Contemporary Latin America Narrative.  Study of novels, short stories and related videos and films that belong to the "boom" period of the Latin American narrative, as well as its immediate precursors and successors.  Emphasis on enabling students to develop skills in oral and written analysis, narration and description, as well as to strengthen reading proficiency. Spring, even years. Prerequisite: SPAN 211 and 212.  3 semester hours. Literature Core Elective. Typically offered Spring Term, Even Years. Consent Required.

SPAN 311  Advanced Written Communications.  Designed to enable students to improve writing skills through extensive practice and intensive study of various forms of written communication. Fall, even years. Prerequisite: SPAN 211, SPAN 212.  3 semester hours. Writing Intensive Course. Typically offered Fall Term, Even Years. Consent Required.

SPAN 312  Advanced Oral Communications.  Continued emphasis on oral proficiency, syntax, and grammar.  Students will work on their ability to respond to the challenges faced when living in an Hispanic culture.  In-depth interviews and tapes will be developed. Spring, even years. Prerequisite: SPAN 211, SPAN 212.  3 semester hours. Typically offered Spring Term, Even Years. Consent Required.

SPAN 395  **Independent Study.** Designed for the advanced student who wishes to explore an aspect of Spanish language or literature beyond the scope of the regular course offerings. Prerequisite: Consent of instructor. 1-3 semester hours.  
*Consent Required. Course Repeatable. Maximum number of units allowed 99.*

SPAN 397  **Internship.** Professional experience designed to enhance proficiency and cultural understanding in human service or business agencies in countries where Spanish is the primary language. Prerequisite: Approved application, Department Consent 2-6 semester hours.  
*Consent Required.*

**Speech**

SPCH 110  **Speech Communication.** An introduction to public speaking, communication theory and small-group and interpersonal communication. The course includes researched extemporaneous speeches and several in-class exercises. Each semester. IAI C2 900. 3 semester hours. Typically offered Fall and Spring Terms.

**Theology**

THEO 101  **Theology of Love.** Examines the concept of "God is Love" in the systematic theology of the Trinity, the Sacramental theology of the Eucharist and Marriage, and the Moral theology of Catholic social ethics and Catholic sexual ethics. 3 semester hours. Religious Studies Core Elect.

THEO 102  **Theology of Justice.** This course examines the idea of justice particularly in relation to the redeeming death of Christ and its implications for theology. It will survey the systematic theology of the Christology and the Atonement; the sacramental theology of the Eucharist, Reconciliation and Holy Orders, and the Moral Theology of Law, social justice and canon law. 3 semester hours. Religious Studies Core Elect.

THEO 103  **Theology of Freedom.** This course examines the concept of freedom in human life and theology, particularly as it relates to the problem of evil, human action and creativity. It will survey the systematic theology of Creation, Salvation History and Eschatology, the study of the last things; the sacramental theology of Baptism, Confirmation and Reconciliation; The ecclesial theology of the laity, and the moral theology of human action and freedom of conscience. 3 semester hours. Religious Studies Core Elect.

THEO 104  **Faith and Science.** This course examines the relationship of faith and reason and the theological underpinnings of Catholic thought and how it related to the secular understanding of science. It will survey the systematic theology of creation and the possibility of reason, the sacramental understanding of creation, the moral theology of ecology and the ecclesial theology of the autonomy of the secular disciplines.  Fall, Spring, Summer. 3 semester hours. Religious Studies Core Elect.

THEO 201  **Survey of the Hebrew Scriptures.** Survey of the Hebrew Scriptures with emphasis on historical context and relation to Catholic systematic theology. Spring. 3 semester hours. Typically offered Spring Term.

THEO 202  **New Testament.** This course is an in-depth study of the New Testament, its origins, interpretation, and transmission to the modern world. Instructor consent. Spring. 3 semester hours. Typically offered Annually.  
*Consent Required.*

THEO 203  **Sacramental Theology.** Study of the history, meaning, and theological significance of the sacraments in Catholic theology. Yearly. 3 semester hours. Religious Studies Core Elect. Typically offered Annually.
THEO 204 Catholic Spirituality. Examines the historical and contemporary contexts of Catholic spirituality. Yearly. 3 semester hours. Religious Studies Core Elect. Typically offered Annually.

THEO 205 Dogmatic Theology. Examines the critical dogmatics and creeds of the church revealing theoretical truths of catholic faith. Even years only. 3 semester hours. Typically offered Even Years.

THEO 206 Christian Ethics. Course examines historical and contemporary issues through Christian ethical analysis. Odd years only. Writing Intensive. 3 semester hours. Religious Studies Core Elect. Typically offered Odd Years.

THEO 207 Catholic Social Teaching. Course examines the history and contemporary application of Catholic social ethics. 3 semester hours.

THEO 208 Sexual Ethics. Course examines Catholic theological, social and ethical teachings on cultural conceptions of sexual identities, and politics and procreation. Yearly. 3 semester hours. Religious Studies Core Elect. Typically offered Annually.

THEO 212 Land, Justice and Peace. This course is a review of the theological and ethical issues underpinning the situation in Palestine and Israel and the impact religion, water, and land have on the search for peace. Spring. Department consent required. 3 semester hours. Religious Studies Core Elect. Typically offered Spring Term. Consent Required.


THEO 225 Pilgrimage. This course will introduce students to the history, theology, and practice of pilgrimage in various religions, including Judaism, Christianity, Islam, and Hinduism. Students will not only study theological texts about pilgrimage, but they will also become familiar with some of the most famous pilgrimage destinations (Jerusalem, Mecca, Rome, Compostela, Guadalupe, Varanasi) and their associated practices. Department Consent. Offered Spring. 3 semester hours. Religious Studies Core Elect. Typically offered Spring Term. Consent Required.

THEO 230 Baptism of Europe. Same content as HUMN 230 with emphasis on the foundation of the Catholic Church and New Testament history. Spring. 3 semester hours. Religious Studies Core Elect. Typically offered Spring Term. Consent Required.

THEO 235 Interreligious Dialogue. This course will introduce various theological approaches to interreligious dialogue, with a special focus on the Roman Catholic perspective. Students will not only study theological texts about interreligious dialogue written by Christians, Muslims, Jews, and Buddhists, but they will also become familiar with real-life encounters between adherents of the various world religions today. 3 semester hours. Religious Studies Core Elect.

THEO 252 Business Ethics in the Context of Catholic Social Teaching. This course examines the standard issues of business ethics from three perspectives: the norms of Kantian Ethics, the utilitarian calculation of the good and the emphasis on the common good, solidarity and subsidiarity of Catholic Social Teaching. It will use case studies to demonstrate the strengths and weaknesses of each of the three approaches to current business problems. 3 semester hours. Religious Studies Core Elect. Typically offered Fall, Spring, and Summer Terms.
THEO 270  Benedictine Wisdom Tradition.  This course will introduce students to the most prominent theologians of the Benedictine Order (and related monastic traditions) throughout history, from St. Benedict himself to medieval mystical theologians such as Bernard of Clairvaux and Hildegard of Bingen, to modern greats such as the Trappist Thomas Merton. Offered Spring, Even years only.  3 semester hours.  Typically offered Spring Term, Even Years.


THEO 302  New Testament.  This course is an in-depth study of the New Testament, its origins, interpretation, and transmission to the modern world.  Instructor consent.  Spring.  3 semester hours.  Typically offered Annually.  Consent Required.

THEO 303  Sacramental Theology.  Study of the history, meaning and theological significance of the sacraments in Catholic theology.  3 semester hours.  Religious Studies Core Elect.

THEO 304  Catholic Spirituality.  Examines the historical and contemporary contexts of Catholic spirituality.  Yearly.  3 semester hours.  Typically offered Annually.

THEO 305  Dogmatic Theology.  Examines the critical dogmatics and creeds of the church revealing theoretical truths of Catholic faith.  Even years only.  3 semester hours.  Typically offered Even Years.


THEO 307  Catholic Social Teaching.  Course examines the history and contemporary application of Catholic social ethics.  Yearly.  3 semester hours.  Typically offered Annually.

THEO 308  Sexual Ethics.  Course examines Catholic theological, social and ethical teachings on cultural conceptions of sexual identities, and politics and procreation. Yearly.  3 semester hours.  Religious Studies Core Elect.

THEO 370  Benedictine Wisdom Tradition.  This course will introduce students to the most prominent theologians of the Benedictine Order (and related monastic traditions) throughout history, from St. Benedict himself to medieval mystical theologians such as Bernard of Clairvaux and Hildegard of Bingen, to modern greats such as the Trappist Thomas Merton. Offered Spring, Even years only.  3 semester hours.  Typically offered Spring Term, Even Years.

THEO 391  Advanced Topics:.  Advanced topic in Theology.  3 semester hours.  Course Repeatable. Maximum number of units allowed 3.

THEO 399  Senior Seminar.  Senior seminar which directs the research of the students to a topic relating theology and the secular discipline of their choice.  The capstone project is a 20,000 word dissertation.  3 semester hours.  Writing Intensive Course. Typically offered Spring Term.  Consent Required.

Writing Program
WRIT 101  Person in Community: Writing Colloquium. A first-year writing-intensive skills course whose content focuses on Benedictine University and its mission of higher learning grounded in the liberal arts and guided by its Benedictine Heritage and Catholic tradition. Students will be introduced to the theme of “Person in Community,” which unites the Cultural Heritage sequence of courses. Readings will encourage students to understand, discuss, and write about issues of contemporary relevance. Emphasis on writing and revising argumentative essays, grammar review, basic library research skills, and textual analysis. Each semester. Grade of “C” or better. IAI CI900. 3 semester hours. Typically offered Fall and Spring Terms.

WRIT 102  Research Writing. A course that introduces students to writing in the disciplines of literature, social science, or biological science. Students study types of writing in the discipline, use advanced library research techniques, write brief literature reviews, and develop and write significant research papers. Grade of “C” or better. IAI CI901. 3 semester hours.

WRIT 104  Person in Community. A first-year course whose content focuses on Benedictine University and its mission of higher learning grounded in the liberal arts and guided by its Benedictine Heritage and Catholic tradition. Students will be introduced to the theme of "Person in Community", which unites the Cultural Heritage sequence of courses. Readings will encourage students to understand, discuss, and write about issues of contemporary relevance. For all freshmen with a 3 or better on the AP test in English Lit/Comp or English Lang/Comp. 1 semester hour. Consent Required.