**Economics (ECON) Courses**

**ECON-C101(3). Principles of Macroeconomics.** Determination of income, employment and the price level. Effects of fiscal, monetary and other policies. Each semester. IAI S3 901.

**ECON-C102(3). Principles of Microeconomics.** Price determination and resource allocation; theories of demand, supply and cost. Each semester. IAI S3 902.

**ECON-150(3). Statistics I.** Basic course in statistical technique; includes measures of central tendency, variability, probability theory, sampling, estimation and hypothesis testing. Prerequisite: MATH-S105 or MATH-S110. Each semester. For Business Majors. IAI M1 902; IAI BUS 901.

**ECON-201(3). Theory of Income and Economic Growth.** Advanced analysis of determinants of national income, employment and price level and consequent policy decisions for unemployment, inflation and economic growth. Prerequisite: ECON-C101, C102. Periodically.

**ECON-202(3). Price Theory and Application.** Analysis of consumer choices and of decision-making by firms under different market conditions. Prerequisite: ECON-C101, C102. Spring.

**ECON-205(3). American Economic History.** (See HIST-205.)

**ECON-206(3). Modern European Economic History.** (See HIST-206.)

**ECON-207(3). Anthropology of Contemporary Industrial Society.** (See ANTH-207.)

**ECON-227(4). Applied Microeconomics.** (Adult BAM Program.) 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 understanding and mastery of skills required by managers of organizational units of all types.

**ECON-251(3). Statistics II.** Covers: Regression and correlation, analysis of variance and nonparametric statistics. Prerequisite: ECON-150. Spring.

**ECON-T291(3). Topics.** Periodically.

**ECON-297(2-6). Internship.** (See ACCT-297).

**ECON-310(3). 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. Prerequisites: ECON-C101, C102. (See FINA-310.) Fall.

**ECON-C320(3). Area Studies.** (See INTB-C320). Periodically.

**ECON-331(3). 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. Prerequisites: ECON-C101, 202. Periodically.

**ECON-340(3). Public Finance.** A general survey of public finance, government income and expenditure, government fiscal policies, principles of taxation and public debt. Prerequisites: ECON-C101, 202 or consent of instructor. Periodically.

**ECON-351(3). International Trade and Development.** Study of trade and growth theories and their applications to the developed and developing nations. Prerequisites: ECON-C101, C102. Periodically.


**ECON-391(3). Topics.** Periodically.

**ECON-395(1-3). Independent Study.**

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**Education (EDUC) Courses**

**EDUC-105(3). Microcomputer Applications to Teaching.** Introduction to microcomputer software programs which relate to programming and management in teaching. Emphasis on selecting software, accessing resources and interfacing software and hardware. (See CMSC-C105.) Spring. Credit will not be granted for both CMSC-100 and EDUC-105.

**EDUC-200(1-2). Pre-Clinical Experience.** Directed observation and participation in off-campus setting. Students participate in a 35 or 70 hour experience. Transportation needed. Prerequisite: Cumulative GPA of 2.50, pre-clinical application and co-registration in EDUC-205 for three semester hours. Each semester. IAI EED 904; IAI SED 905.

**EDUC-205(3). 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, specifically middle grades, are presented. Prerequisite: Cumulative G.P.A. of 2.50 and co-registration in EDUC-200 for one semester hour. Each semester.
EDUC-210(3), Educational Psychology. Survey of theories of classroom learning processes including human growth and development, evaluation, the exceptional child and the disadvantaged child. Emphasis on the developmental characteristics and nature of needs of the early adolescent. Each semester. (See PSYC-241.) IAI SED 902.

EDUC-220(3), The Development and Acquisition of Language in Young Children. Describes the course of language development in universal terms, while emphasizing individual differences and language disorders. Presents the biological foundations of language, the major linguistic systems and the interrelationships between oral language, emergent literacy and writing development. Emphasis on birth through age eight. Prerequisite: Cumulative G.P.A. of 2.5. Periodically.

EDUC-230(3), Early Childhood Assessment. Addresses issues, considerations and procedures for both formal and informal assessment of preschoolers, particularly those with handicaps. Provides opportunities to plan instructional programs based upon the results of assessment. Emphasis on birth through age eight. Prerequisite: Cumulative G.P.A. of 2.5. Periodically.

EDUC-235(3), 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 life-long enrichment. Prerequisite: Cumulative G.P.A. of 2.5. Periodically.

EDUC-240(3), 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. Prerequisite: EDUC-205 and cumulative G.P.A. of 2.5. Fall.

EDUC-250(2), Theory and Practice of Teaching in the Catholic Schools. Provides experiences and insights in appreciation of the distinctiveness of Catholic schools, the ministry of the teacher, the distinctive curriculum and the governance and organization of Catholic schools. In addition, emphasis is placed on specific catechetical methodologies, the faith development of students, and the proper role of parents. Prerequisite: Cumulative G.P.A. of 2.5. Periodically.

EDUC-257(3), Characteristics of Learners with Intellectual Disabilities. Reading and discussion regarding learning and behavioral characteristics of persons labeled as EMH and TMH. 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. Prerequisite: EDUC-260(3) and cumulative G.P.A. of 2.5. Fall.

EDUC-260(3), Survey of the Exceptional Child. Discussion of atypical development: characteristics of persons labeled as having mental retardation, learning disabilities, behavioral disabilities, sensory deficits, and/or speech disorders. Diagnosis, referral, educational strategies and legal implications are reviewed. (See PSYC-204.) Each semester. IAI ECE 913; IAI SED 904.


EDUC-270(3), Problems and Characteristics of Persons 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. Prerequisite: EDUC-260 and cumulative G.P.A. of 2.5. Fall.

EDUC-275(3), 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 partnerships with families. Prerequisite: EDUC-260 and cumulative G.P.A. of 2.5. Spring.

EDUC-305(3), Early Childhood Curriculum and Organizational Methodology. An overview of early childhood education with an emphasis on the handicapped, program models, family involvement and instructional programming. Emphasis is on methods for promoting cognitive, language, social, self-help and motor development. Includes birth through age eight. Prerequisite: Cumulative G.P.A. of 2.5. Periodically.

EDUC-310(3), Measurement and Evaluation. Introduction to basic education statistics, K-12 assessments, understanding assessment issues and understanding educational research. Includes design of classroom tests and educative assessments; portfolio assessment; and assessment strategies for exceptional children. Prerequisite: EDUC-260 and cumulative G.P.A. of 2.5. Each semester.

EDUC-312(3), 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. Prerequisite: EDUC-205 and cumulative G.P.A. of 2.5. Fall.
EDUC-315(3). Methods of Teaching Mathematics-Elementary. Characteristics and concepts of the programs in modern 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. Prerequisite: EDUC-205, co-registration in EDUC-316 and cumulative G.P.A. of 2.5. Fall.

EDUC-316(0). Pre-Clinical Experience: Elementary Math. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-315 and cumulative G.P.A. of 2.5. Fall.

EDUC-318(3). 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. Prerequisite: EDUC-205 and cumulative G.P.A. of 2.5. Spring.

EDUC-320(3). Diagnostic and Corrective Reading. 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. Prerequisite: EDUC-205, 240, co-registration in EDUC-321 and cumulative G.P.A. of 2.5. Each semester.

EDUC-321(0). Pre-Clinical Experience: Reading. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-320 and cumulative G.P.A. of 2.5.

EDUC-322(3) Reading, Writing and Thinking in the Middle and Secondary School Curriculum. Examines the relationship between reading, writing 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. Prerequisite: Cumulative G.P.A. of 2.5. Spring.

EDUC-330(3). Methods of Teaching Physical Science-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-331(3). Methods of Teaching Chemical Science-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-332(3). Methods of Teaching Biological Science-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-335(3). Methods of Teaching Mathematics-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-338(3). Methods of Teaching English-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-340(3). Methods of Teaching Spanish-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, at least two major courses beyond SPAN-202, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-342(3). Methods of Teaching History, Political Science, Economics-Middle/Junior and High School. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Transportation needed. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.

EDUC-343(3). Methods of Teaching Business/Marketing/Management-Secondary. Emphasis is placed on the methods, content and instructional materials utilized in the subject area. Prerequisites: EDUC-205, co-registration in EDUC-350 and cumulative G.P.A. of 2.5. Fall.
EDUC-350(0). Pre-Clinical Experience-Middle/Junior and High School. Thirty-five hours in an off-campus classroom setting. Transportation needed. Prerequisite: Pre-clinical application.

EDUC-352(3). Young Adult and Multicultural Literature in the Middle And Secondary School Curriculum. Evaluation, selection and teaching of of literature to serve the interests and reading needs of students from the middle-school through high school. The course emphasizes literature which reflects the culture and heritage of America’s multiethnic/multicultural population. The course considers 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. Prerequisite: cumulative G.P.A. of 2.5. Periodically.

EDUC-353(3). 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 clinical experience. Transportation is needed. Prerequisite: EDUC-205, co-registration in EDUC-354 and cumulative G.P.A. of 2.5. Spring.

EDUC-354(0). Pre-Clinical 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, and cumulative G.P.A. of 2.5.


EDUC-356(0). Pre-Clinical Experience: Classroom Management. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-355 and cumulative G.P.A. of 2.5.

EDUC-357(4). Methods of Teaching Learners with Intellectual Disabilities. 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 as EMH/TMH. 35 hour preclinical experience required. Transportation needed. Prerequisite: EDUC-257(3), 205(3), 260(3), co-registration in EDUC-358(0) and cumulative G.P.A. of 2.5. Spring.

EDUC 358(0). Pre-Clinical Experience: Intellectual Disabilities Methods. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-357(3) and cumulative G.P.A. of 2.5.


EDUC-361(0). Pre-Clinical Experience: LD Methods. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-360 and cumulative G.P.A. of 2.5.

EDUC-365(3). Methods and Materials for Teaching Children 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 clinical experience. Transportation needed. Prerequisite: EDUC-205, 260, 270, co-registration in EDUC-366 and cumulative G.P.A. of 2.5. Spring.

EDUC-366(0). Pre-Clinical Experience: ED Methods. Thirty-five hours in an off-campus setting. Transportation needed. Prerequisite: Pre-clinical application, co-registration in EDUC-365 and cumulative G.P.A. of 2.5.

EDUC-370(10-12). Student Teaching Elementary and Middle School. Full semester teaching experience under professional guidance, including observation, planning and supervised teaching. 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 and admitted into T.Ed. program. Each semester.

EDUC-371(10-12). Student Teaching-Middle/Junior and High School. Full semester teaching experience under professional guidance, including observation, planning and supervised teaching. 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 and admitted into T.Ed. program. Each semester.

EDUC-372(5-6). Student Teaching-Elementary Special Education, LD/SED. Half-semester student teaching under professional guidance. Includes observation, planning and supervised teaching in the
elementary school. Prerequisites: 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 and admitted into T.Ed. program. Each semester.

EDUC-373(5-6). Student Teaching-Secondary Special Education, LD/SED. Half-semester student teaching under professional guidance. Includes observation, planning and supervised teaching in the secondary school. Prerequisites: 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 and admitted into T.Ed. program. Each semester.

EDUC-374(5-6). Student Teaching K-8 Elementary Music Education. Half-semester student teaching under professional guidance. Includes observation, planning and supervised teaching in the elementary school. Prerequisites: Co-registration in EDUC-375, 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 and admitted into T.Ed. program. Each semester.

EDUC-375(5-6) Student Teaching 6-12 Secondary Music Education. Half-semester student teaching under professional guidance. Includes observation, planning and supervised teaching in the secondary school. Prerequisites: Co-registration in EDUC-374, 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 and admitted into T.Ed. program. Each semester.

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

EDUC-395(1-3). 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 and cumulative G.P.A. of 2.5.

EDUC-397(1-6). Internship. Practical experience in an educationally related field, i.e. training and development – under the supervision of the education program. Prerequisite: Consent of internship coordinator and education advisor. Prerequisite: Cumulative GPA 2.5.

Engineering Courses

ENGR-120(2). Engineering Graphics. Fundamentals of engineering communications employing applied geometry in instrument and CAD presentation and interpretation of orthographic, auxiliary, sectional, intersection, development and pictorial views. Introduction to basic machine elements and shop practices. Fall.

ENGR-121(2). Engineering Design. Analysis of engineering data using charts, graphs and diagrams. Study of basic engineering concepts of materials, procedures and design of mechanisms, structures, mechanical and electrical systems using MicroStation, Autocad LT and Autosketch. Prerequisite: ENGR-120. Spring.

ENGR-220(3). Statics. Conditions for equilibrium, torque, couple, equivalent force systems, distributed forces, center of mass, hydrostatic pressure fluid statics and deformable bodies. Prerequisite: PHYS-C211 and credit or co-registration in MATH-211. (See PHYS 220.) Fall. IAI EGR 942.

ENGR-221(3). Dynamics. Kinematics of a point and rigid body. Newton’s laws, linear, and angular momentum, central forces, and collisions. Prerequisite: ENGR-220, MATH-211. (See PHYS 221.) Spring. IAI EGR 943.

ENGR-230(3). Circuit Analysis. Linear network analysis, transformation concepts, equivalent circuits, power transfer, AC response, transients and resonance. Prerequisite: MATH-260, PHYS-C212, or consent of instructor. (See PHYS 230.) Periodically.

English as a Second Language (ESLS) Courses

ESLS-010(2). 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.
ESLS-011(2). 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.

ESLS-013(2). 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. Prerequisite: Co-registration with ESLS-014. Each semester.

ESLS-014(2) /024(2) / 034(2). Pronunciation I/II/III Lab. 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.

ESLS-015(3). Beginning Writing. Emphasizes sentence level grammar; practice supplying written responses to questions. Begins to organize ideas into simple paragraph form. Prerequisite: Co-registration with ESLS-016. Each semester.

ESLS-016(1). Grammar I Lab. 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.

ESLS-020(2). 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.

ESLS-021(2). 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.

ESLS-025(3). 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.

ESLS-026(1). 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.

ESLS-027(1-3). 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.

ESLS-030(2). 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.

ESLS-031(2). 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.


ESLS-033(2). 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.


ESLS-035(3). Advanced Writing. Focuses on writing as a process. Writes cohesive works in various patterns of essay organization. Prerequisite: Co-registration with ESLS-035. Each semester.

ESLS-036(1). Grammar III Lab. Workshop oriented course 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; adjectives clauses and adjective phrases; gerunds and infinitives; modals; passives; conditional; adverb clauses and phrases; connecting ideas. Practices error correction and TOEFL tests. Each semester.

ESLS-037(1-3). 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.

ESLS-071(1-3). 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.

ESLS-100(3). College Conference Writing. This bridge course introduces and develops college-level writing as
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.

**Environmental Science (ENVS) Courses**

ENVS-C105(3). Earth Sciences. 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. (See GEOL-C105(3) or PHYS-C105(3).)

ENVS-205(3). Introduction to 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. Prerequisite: BIOL-C108. Spring. (See BIOL-205.)

ENVS-210(1). OSHA Hazardous Waste Operation and 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. Prerequisite: written permission of the instructor. Spring.

ENVS-211(0.5). 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 (or valid HAZWOPER 40-hour certificate) and written permission of the instructor. Spring.

ENVS-300(4). Limnology. The study of the interrelations among the physical, chemical and biological components of freshwater ecosystems. Includes taxonomy, adaptations, distributions and abundance of aquaticorganisms. Prerequisite: CHEM-C124, and BIOL-229 or CHEM-236. Periodically. (See BIOL-300.)

ENVS-305(4). 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. Prerequisite: BIOL-256 or 258. Periodically. (See BIOL-305.)

ENVS-398(1-3). 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. Prerequisite: written consent of the instructor. Periodically, May be repeated.

**Finance (FINA) Courses**

FINA-297(2-6). Internship. (See ACCT-297.)


FINA-310(3). Money and Financial Markets (See ECON-310.)

FINA-320(3). Investments. A study of investment policy for individuals and institutions, security evaluation methods and portfolio management. Prerequisite: FINA-300. Periodically.

FINA-330(3). Business and Economic Forecasting. Acquaints 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. Prerequisite: FINA-300 and good spreadsheet skills. (See MBA-613 in graduate catalog.) Periodically.


FINA-360(3). International Money and Finance. (See ECON-360).

FINA-380(3). Advanced Managerial Finance. A continuation of managerial finance with a focus on corporate financial decisions. Case approach to various advanced topics. Prerequisite: FINA-300, senior standing. Spring.

FINA-381(3). International Corporate Finance. (See INTB-381.)

FINA-391(3). Topics.

FINA-395(1-3). Independent Study.
**Fine Arts (FNAR) Courses**

FNAR-C100(3). Art Appreciation. Introduction to the visual arts through lectures, discussions and field trips. Each semester. IAI F2 900.

FNAR-C101(3). Fundamentals of Design. Emphasizes the knowledge and application of basic design principles of two-dimensional images in representational and abstract forms. Fall.

FNAR C102(3). Sculpture: Clay Modeling. Introduction to fundamental design concepts, materials and techniques related to the production of traditional sculptural objects. This course focuses on additive techniques of clay modeling and plaster mold casting.

FNAR-C111(3). 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.

FNAR-120(3). Lettering and Layout-Foundational. Introduction to calligraphic lettering with a broad-nib pen. Explores a variety of designs and techniques in foundational and related hands. Fall.

FNAR-121(3). Lettering and 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.

FNAR-C203(3). Ancient and Medieval Art. Photographic presentations of significant paintings, sculptures and buildings with emphasis on religious concepts. Fall. IAI F2 901; ART 901.

FNAR-C204(3). 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.

FNAR-210(3). Figure Drawing. Introduction to drawing the human figure from observation. Periodically. IAI ART 906.

FNAR-225(3). Art Methods and Materials for Classroom Teachers. (See EDUC-225.) Periodically.

FNAR-240(3). Intaglio Printmaking. A studio course emphasizing the etching medium. Spring.

FNAR-241(3). Relief Printmaking. Introduction to the woodcut and relief processes. Periodically.

FNAR-242(3). Silk-Screen Printing. A studio course on silk-screen printmaking. Fall.

FNAR-C250(3). Oil Painting. An introductory studio course emphasizing color mixing as it relates to traditional representation. Spring. IAI ART 911.

FNAR-295(1-2). Educational Travel. Guided tour of religious and cultural monuments in various countries. Between semesters.

FNAR C305(3). Advanced Painting. Representation of the human figure in oil painting while concentrating on compositional devices used throughout the history of art. Prerequisite: Oil Painting I.

FNAR C311(3). 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. Prerequisite: Drawing I.

FNAR 350(3). Senior Seminar. Exhibition Portfolio. (Admission restricted to art majors.) The first of two required senior seminars. Preparation of a body of work for the senior exhibition requirement. Topics include photographic documentation techniques, exhibition mounting, exhibition protocols, along with an on-going critique of the students work. (Taken typically spring semester of senior year.)

FNAR-391(1-3) Topics. Focuses on various topics relating to the needs of the students and recent events and/or topics of interest. Periodically.

FNAR-395(1-3) Independent Study. Advanced drawing, printmaking, painting or lettering and layout.

FNAR-396(3)/397(3). 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.

FNAR-398(3). 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. (Taken typically in the fall semester of senior year.)

**French (FREN) Courses**

FREN-101(3)/102(3). Elementary French I, II. Introduction to the basic structure of the language. These courses are designed to enable the student to develop oral proficiency and written skills. Fall and spring.

FREN-201(3)/202(3). Intermediate French I, 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. Prerequisite: FREN-102. Fall and spring. IAI H1 900.
FREN-211(3). Intermediate Grammar and Composition. Comprehensive review and synthesis of French 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. Prerequisite: FREN-202. Fall.

FREN-212(3). 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 French culture. Prerequisite: FREN-202. Spring.

FREN-213(3). Business French. Introduction to 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. Prerequisite: FREN-211. Periodically.

FREN-294(2). French Conversation Teaching Assistant. To provide French 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: FREN-211 and FREN-212.

FREN-295(1-3)/395(1-3). Independent Study. Designed for the intermediate (295) or advanced (395) student who wishes to explore an aspect of French language or literature beyond the scope of the regular course offerings. Prerequisite: Consent of instructor.

FREN-C311(3). Introduction to French Literature. Close reading of selected French novels, poetry, drama and essays. Analysis of how they reflect and influence the thinking of the 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. Prerequisite: FREN-211. Fall.

FREN-312(3). Elements of French Civilization and Culture. Designed to allow students to work on development of language proficiency through class discussion and selected readings concerned with key elements in French civilization: the family, church, governmental and social relations, and how these factors have shaped the artistic, literary and historic experience of French people. Prerequisite: FREN-211. Spring.

Gender Studies (GENS) Courses

GENS-C100(3) Introduction to Gender Studies. 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 enacted 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. Even years.

Geography (GEOG) Courses

GEOG-C105(3). Earth Science. A study of physical earth. Topics include: earth-sun relationships, weather, climate, origin of landforms, rocks, minerals, topographical maps, soils and vegetation. (See PHYS-C105.) Periodically. IAI P1 909.

Health Administration (HADM) Courses

HADM-300(3). U.S. Health Care System. Multidisciplinary examination of the various aspects of the existing health care industry in the U.S. including the impact of managed care on process and outcome. Also explores governmental and and economic influences on the system. Prerequisite: Senior HADM majors only (See MPH-602 in graduate catalog.). Fall and summer.
HADM-301(3). Health Behavior. This course gives an overview of social, psychological, and biological determinants of human health behavior and behavior change methods. Prerequisite: Nutrition students admitted to MPH program only. (See MPH-601 in the graduate catalog.) Fall and summer.

HADM-303(3). Ethical and Political Issues in Public Health. This course focuses on political, ethical and economic analysis of the organization of public health efforts at the international, national, state and local levels. Prerequisites: Nutrition students admitted to MPH program only and HADM-300. (See MPH-603 in the graduate bulletin.) Winter and spring.

HADM-358(1.5). Financial Planning in Health Care Organizations. Principles and techniques of financial management with an emphasis on intermediate- and long-range planning and application to health care organizations. Prerequisite: HADM-300 and Senior HADM majors only. (See MPH-608 in the graduate catalog.) Fall and spring.

HADM-363(1.5). Legal Aspects of Health Care Administration. Patient right/consent, reimbursement, expansion, malpractice risk management and coordination with regulatory agencies. Prerequisite: HADM-300 and Senior HADM majors only. (See MPH-623 in the graduate catalog.) Winter and summer.

HADM-371(1.5). Managed Care I. Prerequisite: HADM-300 and Senior HADM majors only. (See MPH-671 in the graduate catalog.) Fall quarter.

HADM-372(1.5). Managed Care II. Prerequisite: HADM-300 and Senior HADM majors only. (See MPH-672 in the graduate catalog.) Fall quarter.

Health Science (HLSC) Courses

HLSC-198(2). Pre-Nursing Seminar. A course designed to prepare the pre-nursing student for the transition into the professional component of education. Emphasis will be placed on professionalism and historical aspects of nursing as a basis for maximizing socialization into the nursing profession. Clinical visits and observations will provide opportunities for students to observe professional nursing as it is practiced in a variety of settings.

HLSC-291(1-3). Selected Topics in Health Science. Special topics in health science. Prerequisite: Consent of instructor. May be repeated. Each semester.


HLSC-300(2). Practicum Experience in Veterinary Medicine. Consent of director, 3.0 G.P.A. and 30 hours completed at Benedictine University.

HLSC-301A(2). Practicum Experience: Medicine. Prerequisite: Registration or credit in BIOL-203, 254 or 258. Consent of director and 3.0 G.P.A. and 30 completed hours at Benedictine University.

HLSC-302(2). Practicum Experience in Dentistry. Consent of director and 3.0 G.P.A. and 30 hours completed at Benedictine University.

HLSC-303(2). Practicum Experience in Occupational Therapy. Consent of director, 3.0 G.P.A. and 30 hours completed at Benedictine University.

HLSC-305(2). Practicum Experience in Podiatry. Consent of director, 3.0 G.P.A. and 30 hours completed at Benedictine University.


HLSC-309(2). Practicum Experience in Optometry. Consent of director, 3.0 G.P.A. and 30 hours completed at Benedictine University.

HLSC-310(2). Practicum Experience in Chiropractic. Consent of director, 3.0 G.P.A. and 30 hours completed at Benedictine University.

HLSC-321(2). Measurement and Evaluation of Fitness - Laboratory Methods. (See CVH-603 in graduate catalog.) Fall quarter.

HLSC-322(2). Exercise Physiology. (See PIOL-620 in graduate catalog.) Summer quarter.

HLSC-360(3). Cardiovascular Physiology. (See PIOL-614 in graduate catalog.) Prerequisite: Admission to 4+1 program. Winter quarter.

HLSC-361(3). Physiology of Muscle And Respiration. (See PIOL-615 in graduate catalog.) Spring quarter.

HLSC-372(3). Stress Management. (See MPH-616 in graduate catalog.) Fall quarter.

HLSC-374(1). Techniques of Health Counseling. (See CVH-612 in graduate catalog.) Winter quarter.

HLSC-389(1-3). 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. Prerequisite: Consent of instructor. Each semester.

HLSC-390(1). Internship Preparation. (See CVH-615 in graduate catalog.) Winter quarter.
HLSC-391(1-3). Selected Topics in Health Sciences.
Special courses in the health fields 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. Prerequisite: Consent of instructor. Each semester. May be repeated.

**History (HIST) Courses**

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**Degree Completion and Adult Program Students:** All history courses sequenced from HIST-101 through HIST-391 meet the R designation for fulfilling the arts and humanities core requirements.

HIST-101(3). 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.

HIST-102(3). Western Civilization since 1715. An integrated survey of the development and interaction of national states in the Western world since 1715. Periodically. IAI H2 902.

HIST-103(3). World Civilization in the 20th Century. Surveys the political, economic, social and intellectual developments in the 20th century from the global perspective. Fall.

HIST-191(3)/192(3). Selected Topics: European/American/Non-Western. Special areas of study in European, American and non-Western history, offered from time to time on the introductory level according to time and interest of staff and students.

HIST-201(3). American History to 1865. Covers the Colonial era, the revolutionary age, internal growth of the Republic and causes of the Civil War. Fall. IAI S2 900.

HIST-202(3). American History since 1865. Covers the industrialization of America; the organization of labor; the development of imperialism; the growth of foreign policy. Spring. IAI S2 901.

HIST-203(3). Historiography. Introduction to the methodology and practice of history and to some of the great historians. Includes an emphasis on world history.


HIST-206(3). Modern European Economic History. Analyzes the evolution of manufacturing, agriculture, demography and international trade of Europe since 1500. (See ECON-206.) Periodically.


HIST-T211(3). Modern Africa. Surveys the major historical and cultural developments in Africa from the 19th century to the present. Periodically.

HIST-220(3). The Mediterranean World. (See HUMN-220.)


HIST-230(3). The Baptism of Europe. (See HUMN-230.)

HIST-240(3). Converging Hemispheres. (See HUMN-240.)

HIST-242(3). 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. Periodically.

HIST-243(3). 20th Century Church History. Analyzes the impact of 19th century developments, the world wars, decolonization, intellectual trends and Vatican II’s origins and results. Periodically.

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

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

HIST-255(3). 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. Periodically.

HIST-260(3). 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.


HIST-262(3). Jacksonian and Civil War America: 1828-1877: Traces the changes in America caused by early industrialization, continental expansion, slavery, the causes of the Civil War and problems and developments in reconstruction. Spring, even years.

HIST-263(3). 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. Fall, even years.

HIST-264(3). America Since World War II. Discusses the impact of World War II, the Cold War, the affluent society, and contemporary society. Spring, odd years.

HIST-265(3). 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. Fall.

HIST-267(3). 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. Periodically.

HIST-291(3)/292(3)/293(3). Selected Topics; European/American/Non-Western. A study of various persons, events, trends and institutions in European, American or non-Western History. Periodically.

HIST-303(3). Historiography. Introduction to the methodology and practice of history and to some of the great historians. Includes an emphasis on world history.

HIST-391(3)/392(3)/393(3). Seminar: European/American/Non-Western. Directed readings and research to be used in discussions pertaining to specific topics in European, American or non-Western history. Prerequisite: Junior - Senior standing or consent of instructor.

HIST-395(3). 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.

HIST-397(3). Internship. Practical experiences in a related career field under the supervision of the History Department. Prerequisite: Consent of coordinator and 3.00 G.P.A..

HIST-399(3). Major Research Paper. Directed reading and research on specific historical events, persons or eras. Prerequisite: Junior - Senior standing and consent of coordinator. Each semester.

Honors (HNRS) Courses

HNRS-S190(3)/S191(3). First Year Colloquium I, II. Students develop communications and research skills while being introduced to contemporary issues. Completion of both HNRS-S190 and S191 counts as proficiency for both RHET-S102 and S110. Fall, spring.

HNRS-195(3). Organizational and Group Dynamics. Presents leadership theory and helps students develop a leadership style. Topics include group dynamics, assertiveness, trust and risk-taking, problem solving, delegation and motivation. Fall, sophomore year.

HNRS-220(3). The Mediterranean World. (See HUMN-220.)

HNRS-230(3). The Baptism Of Europe. (See HUMN-230.)

HNRS-294(3). Creativity, Art and Culture. A critical examination of classic and contemporary works of art and theories concerning artistic creativity. Focus is on works of art and the cultures from which art derives. Applicable to humanities core. Fall, senior year.

HNRS-320. Converging Hemispheres. (See HUMN-320.)

HNRS-393(3). Global Interdependence.

HNRS-395(1-3). Independent Study.
HUMN-100(1). 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. Prerequisites: co-registration in HUMN-101; recommendation of Admissions Committee or consent of advisor. Fall.

HUMN-220(3). 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 relation “person in community” as reflected in religion, art, philosophy, and social, political and economic institutions. Each semester. IAI H9 900.

HUMN-230(3). The Baptism of Europe. This course 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 theme of “person in community” will be viewed through social structures (religious, political, economic) and through the interactions and/or conflicts between people and cultures (Eastern and Western Christianity; Christianity, Judaism, Islam). Each semester. IAI H9 900.

HUMN-240 (3). 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 reformations and revolutions, resistance and republicanism. Each semester. IAI H9 900.

HUMN-250(3). 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.

Information Systems (CIS) Courses

CIS-C120(4). Information Systems: Principles and Programming. Techniques and theory of information systems in a rapidly changing technical environment. Technology topics include hardware, software, communications, databases, emerging technologies, internet and intranet. Information systems topics include information processing concepts and functional systems used in business. Provides programming fundamentals, with applications developed in a high-level language. Programming topics include variables, formatted input/output, arrays, looping, conditional execution, subroutines and functions. Prerequisite: none. Each semester.

CIS-C127(3). 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 and technology. The technology covered in the class will include hardware, software, communications, database, emerging technologies, internet and intranets.

CIS-C200(4). Introduction to Computer Science. (See CMSC-C200.)

CIS-C205(4). Data Structures and Algorithms. (See CMSC-C205.)

CIS-C220(4). Computer Organization and Architecture. (See CMSC-C220.)

CIS-C300(4). Data Storage and Management. (See CMSC-C300.)

CIS-C310(3). Operating Systems. (See CMSC-C310.)

CIS-C330(3). Database Design. (See CMSC-C330.)