Eco Nicola Goffinet

20. Biology of Fishes
Second semester, alternate years. Four credits. Three class periods and one three-hour laboratory period. Prerequisite: BIOL 108. Not open for credit to students who have passed NRME 200, 201 or 202 or MARN 200, 201 or 202. Schultz.

An introduction to the biology of fishes, with an emphasis on adaptation and evolutionary diversification. Topics include the evolution of major groups, morphology, physiology, behavior, and population and community ecology. Lectures, critical discussions of current journal articles, student presentations, and exercises in the field and laboratory. Field trips required.

203. Developmental Plant Morphology
(Also offered as EEB 303.) First semester, alternate years. Four credits. Two class periods and two 2-hour laboratory periods. Prerequisite: BIOL 108 or instructor consent. Jones.

Analysis of diversity in plant form; principles of plant construction and development.

204. Aquatic Plant Biology
(Also offered as EEB 304.) First semester, alternate years. Four credits. Two lectures and two 3-hour field lab/laboratory periods. Prerequisite: BIOL 108 or 110 or instructor consent. Les.

Field and laboratory-oriented study of the anatomy, morphology, ecology, physiology, systematics and evolution of vascular aquatic and wetland plants.

205. Current Issues in Environmental Science
(Also offered as GEOL 205.) Second semester, alternate years. Three credits. Open to honors students. Open to non-honors students only with consent of instructor. Prerequisite: 8 credits of college level science. Simon, Thorson.

Readings and discussions of current issues in environmental science, emphasizing linkages between earth, oceans, atmosphere, and biosphere. Topics include: climate change; watershed changes; alternative energy; population growth; endangered biodiversity; genetically-engineered organisms; deforestation/restoration; risk assessment; tradeoffs; problem-solving; alternative futures.

214. Biology of the Vertebrates
First semester. Three credits. Two 1-hour lecture periods, with demonstrations. Prerequisite: Three credits of introductory Biology. Open to sophomores or higher. Robins, Schwemb, Wells.

Evolutionary history and diversity of vertebrates with emphasis on classification, fossil history, feeding, locomotion, physiological ecology, reproduction, defense, and social behavior.

227. Biology of Plants
First semester. Three credits. Prerequisites: BIOL 108 or 110 or instructor consent. Open to sophomores or higher. L. Lewis.

Structure, function, evolution, and ecology of plants. Importance of plants for ecosystems and human life.

238. Limnological Methods
Second semester. Three credits. One class period and two 3-hour field/laboratory periods. Prerequisite: Consent of instructor and CE 268 or EEB 247, either of which may be taken concurrently. This course and CE

207 may not both be taken for credit. Rich.

Field and laboratory study of physical, chemical, and biotic elements of freshwater habitats. Field trips required.

240. Biology of Bryophytes and Lichens
(Also offered as EEB 340.) Second semester, alternate years. Four credits. Three class periods and one 3-hour laboratory period. Prerequisites: Six credits of 200-level biology or instructor consent. Goffinet.

Diversity, evolution, ecology, development and taxonomy of the bryophytes (mosses, liverworts and hornworts) and lichen-forming fungi.

243. Insect Classification and Identification
Second semester, alternate years. Four credits. Two 1-hour lecture periods and one 4-hour laboratory. Prerequisite: EEB 286. Not open for credit to students who have passed EEB 233 or instructor consent. Henry.

Insect classification, evolution, and phylogeny.

242W. Insect Classification and Identification
Second semester, alternate years. Four credits. Two 1-hour lecture periods plus individual tutorial. Prerequisite: EEB 286 and consent of instructor. ENGL 105 or 110 or 111 or 250. Henry.

Content as in EEB 243; field, museum, and library research; requires major writing assignment.

244. General Ecology
First semester. Four credits. Prerequisite: Six credits of college biology. Three lectures and one 2-hour discussion section. Open to sophomores or higher. Adams, Cardon, Chazdon, Colwell, Sillander, Turchin.

Fundamental ecological dynamics of communities, populations and ecosystems, with emphasis in discussion sections on reading primary literature, problem-solving, and exposure to ecological research techniques.

244W. General Ecology
Four credits. Prerequisite: Six credits of college biology. ENGL 105 or 110 or 111 or 250. Open to sophomores or higher. Content as in EEB 244; requires major writing assignment.

245. Evolutionary Biology
Second semester. Three credits. Prerequisite: Six credits of college biology and three credits of college chemistry. Open to sophomores or higher. Cairns, Henry, Holsinger, Jockusch, Simon.

Introduction to evolutionary mechanisms, biogeography, and the history of major groups of plants and animals.

245W. Evolutionary Biology
Four credits. Four class periods. Prerequisite: Six credits of college biology and three credits of college chemistry. ENGL 105 or 110 or 111 or 250. Open to sophomores or higher.

Content as in EEB 245; requires major writing assignment.

247. Limnology
(Also offered as CE 268 and ENVE 268.) First semester. Three credits. Prerequisite: (MATH 109 or 112 or 115) and (CHEM 122, 127, or 129 or 137). Recommended preparation: BIOL 107 or an introductory biology course.

Physical, chemical, and biotic interrelationships of freshwater habitats (see also EEB 238).

249. Biology of the Honey Bee
Summer session, alternate years. Three credits. Two class periods and one 2-hour laboratory period. Prerequisite: Three credits of introductory biology. Open to sophomores or higher.

Chemical communication, structure and function in honey bee hives and colonies; practical beekeeping.

252. Field Entomology
Either semester, summer sessions, or any fractions thereof. Credits and hours by arrangement, to permit offering special sessions of the course to interested students during the spring recess or between fall and spring semester break. Consent of instructor required.

Collection, identification, and ecology of insects.

254. Mammalogy
(Also offered as EEB 454.) First semester, alternate years. Four credits. Two class periods and one 4-hour laboratory period. Prerequisite: Six credits of 200-level biology courses and consent of instructor. EEB 214 is recommended. Schwenk.

Diversity, behavior, reproduction, ecology, and evolution of mammals. Laboratories cover anatomy, systems, and distribution of major groups of mammals. Field trips required.

256. Plants and Civilization
Either semester. Three credits. Prerequisite: Three credits of introductory biology. Anderson.

Plants and animals used by people; origin, history, biology, distribution, and role in development of civilizations.

265. Herpetology
(Also offered as EEB 465.) Second semester, alternate years. Four credits. Two class periods and one 4-hour laboratory period. Prerequisite: Six credits of 200-level biology and consent of instructor. EEB 214 is recommended. Wells.

Physiological ecology, reproductive biology, behavior, and community ecology of amphibians and reptiles. Laboratories cover evolution, systematics, and distribution of amphibians and reptiles of the world. Field trips required.

268. Ecological Plant Geography
Second semester, alternate years. Three credits. Three class periods and one weekend field trip. Prerequisite: EEB 244 and 245 or instructor consent.

Geographical differences in vegetation composition and plant adaptation. A global perspective on effects of climate, soil, local conditions and ecosystem processes.

269. Social Insects
(Also offered as EEB 369.) Second semester, alternate years. Three credits. Prerequisite: Six credits of introductory biology. Adams.

Behavior, ecology, evolution of social insects: ants, wasps, bees, and termites.

271. Systematic Botany
Second semester, alternate years. Four credits. Two class periods and two 2-hour laboratory periods. Prerequisite: BIOL 108 or 110. Les.

Classification, identification, economic importance, evolution and nomenclature of flowering plants. Laboratory compares vegetative and reproductive characters of major families.

272. The Summer Flora
Summer session. Three credits. Prerequisite: Three credits of college botany.

Identification of Connecticut’s native and exotic plants; lecture, laboratory and field study.

273. Comparative Vertebrate Anatomy
Second semester, alternate years. Four credits. Three class periods and one 3-hour laboratory period. Prerequisite: BIOL 108. Open to sophomores or higher. Schwemb.

Anatomy, development, functional morphology, and evolution of living vertebrate animals.

275. Invertebrate Zoology
First semester, alternate years. Four credits. Two class periods and one 4-hour laboratory period. Prerequisite: Six credits of introductory biology. Cairns.
Body organization, functional morphology and evolution compared among major invertebrate phyla. Field trips required.

276. Plant Anatomy
First semester, alternate years. Four credits. Two class periods and two 2-hour laboratory periods. Prerequisite: BIOL 108 or 110 or instructor consent. *Jones*
Internal structure of seed plants: development and environmental responses.

277. Floristics of Vascular Plants
First semester. Four credits. Two class periods and two 2-hour laboratory periods. Prerequisites: BIOL 110. Taxonomy of common local vascular plants.

280. Evolution of Green Plants
(Also offered as EEB 380.) Second semester, alternate years. Four credits. Two one and a half class periods and one 3-hour laboratory period. Prerequisite: BIOL 108 or 110 or instructor consent. *Goffinet, L. Lewis*
Introduction to morphological, ultrastructural, and molecular characters used for inferring evolutionary relationships of green plants, from green algae to flowering plants, with emphasis on evolutionary changes involved in the transition from aquatic to terrestrial habitats.

281. Ornithology
Second semester. Two credits. Two class periods. Not open for credit to students who have passed EEB 285. *Rubega*
Adaptations, habits, and importance of birds.

281W. Ornithology
Second semester. Three credits. Prerequisite: Consent of instructor; ENGL 105 or 110 or 111 or 250. *Rubega*
Content as in EEB 281; requires major writing assignment.

283. Introduction to Animal Parasitology
First semester, alternate years. Four credits. Two class periods, and two 2-hour laboratory periods. Prerequisite: BIOL 108. *Caira*
Protozoan and metazoan parasites of humans and other animals.

284. Medical Entomology
Second semester, alternate years. Three credits. Two class periods and one 2-hour laboratory period. Prerequisite: BIOL 108. *Schaefer*
Identification and biology of disease-spreading poisons, and parasitic arthropods.

284W. Medical Entomology
Four credits. Prerequisite: BIOL 108; ENGL 105 or 110 or 111 or 250. *Rubega*
Content as in EEB 284; requires major writing assignment.

286. General Entomology
First semester. Four credits. Two class periods and two 2-hour laboratory periods. Prerequisite: BIOL 108. *Henry, Schaefer, Wagner*
The biology of insects: anatomy, physiology, ecology, behavior, development, evolution, and diversity.

287. Ornithology Laboratory
Second semester. Two credits. One 4-hour laboratory period, required field trips. Prerequisite: Consent of the instructor. Open only to students who are currently taking, or have completed, EEB 281. *Rubega*
Methods of field study and identification of birds; functional morphology, preparation of study skins and specimens. Field trips, including at least one required day-long weekend trip.

288. Concepts of Applied Entomology
Second semester, alternate years. Four credits. Three class periods and one 3-hour laboratory period. Prerequisite: BIOL 108 or 110. *Schaefer*
Control, ecology, economics, damage assessment and detection of insect infestations.

289. Variable Topics
Either semester. Three credits. With a change of topic, may be repeated for credit. Prerequisites and recommended preparation vary.

290. Biology of the Algae
(Also offered as EEB 390.) First semester, alternate years. Four credits. Three lectures and one 4-hour laboratory. Prerequisite: BIOL 108 or 110 or instructor consent. *L. Lewis*
Laboratory and field-oriented study of major groups of algae, emphasizing structure, function, evolution, systematics, and ecology.

292W. Senior Research Thesis in Ecology and Evolutionary Biology
Either semester. Three credits. Hours by arrangement. Prerequisite: Three credits of EEB 299, which may be taken concurrently; ENGL 105 or 110 or 111 or 250. Open only with consent of instructor and department honors committee. Not limited to honors students. A "W" course for students writing a senior thesis on their independent research.

293S. Methods of Ecology (W,C)
First semester. Four credits. Two class periods and two 3-hour laboratories. Prerequisite: EEB 244 or instructor consent; ENGL 105 or 110 or 111 or 250. Recommended preparation: One course in statistics and one course in calculus. *Chazdon, Silander*
An intensive introduction to field and laboratory methods in ecology. Emphasis will be placed on the use of quantitative and analytical techniques in physiological, population, community and ecosystem ecology. An introduction to sampling procedures, data collection and statistical analysis. Computers will be used to model population and community dynamics and to analyze ecological data sets. Laboratory periods will consist of field and laboratory problems; field trips required, including occasional weekend trips.

294. Marine Biology
(Also offered as MARN 294.) First semester. Three credits. Two class periods and one 2-hour laboratory period. Prerequisite: One year of laboratory biology. *Whitlatch*
The study of the kinds and distributions of marine organisms. Particular attention is paid to biotic features of the oceans, organism-habitat and relationships and general ecological concepts influencing marine populations and communities. Field trips are required.

296. Physiological Ecology of Animals
Second semester, alternate years. Three credits. Prerequisites: BIOL 107 and BIOL 108. *Schultz*
Physiology of animals in an evolutionary context: how individuals cope and how species adapt to natural environments. Lectures, student-led presentations, and critical discussions of current journal articles.

297. Undergraduate Seminar
Either or both semesters. Credits and hours by arrangement. May be repeated for credit with a change in topic. Content varies with instructor.

298. Special Topics
Either semester. Credits and hours by arrangement. With a change in content, may be repeated for credit. Prerequisites and recommended preparation vary.

299. Independent Study
Either or both semesters. Credits and hours by arrangement. Open only with consent of instructor and the department honors committee. May be repeated for credit with a change in topic.
Independent investigation of special problems in ecology and evolutionary biology.

Economics (ECON)
Head of Department: Professor Kathleen Segerson
Department Office: Room 328, Monteith Building
For major requirements, see the College of Liberal Arts and Sciences section of this Catalog.

101. Essentials of Economics
Either semester. Three credits. Not open for credit to students who have passed ECON 102, 111, 112, or 113.
A one-semester general introduction to micro- and macroeconomics. Economic concepts include: opportunity costs, demand and supply, incentives, comparative advantage, inflation and employment policies, balance of international payments, and economic growth.

102. Principles of Economics (Intensive)
(Formerly offered as ECON 113.) Either semester. Four credits. Four class periods. Recommended preparation: ECON 101. Not open for credit to students who have passed ECON 102, 111, 112, or 113. May not be taken concurrently with ECON 111 or 112.
Same core principles as ECON 111 and 112. One half macroeconomics and one half microeconomics. More demanding than ECON 111 and 112. Substitutes for ECON 111 or 112 as a prerequisite for all junior- to senior-level courses. May or may not substitute for ECON 111 and 112 outside economics; check Catalog.

111. Principles of Macroeconomics
Either semester. Three credits. May be taken before or after ECON 112. Not open for credit to students who have passed ECON 102 or 113. May not be taken concurrently with ECON 102.
The organization and function of the economic system as a total unit. Economic decisions, institutions, and policies that determine levels and rates of growth of production, employment, and prices. Topical subjects (e.g., government budget deficits and current interest-rate policy).

111C. Principles of Macroeconomics

112. Principles of Microeconomics
Either semester. Three credits. May be taken before or after ECON 111. Not open for credit to students who have passed ECON 102 or 113. May not be taken concurrently with ECON 102.
How the invisible hand of the market functions through the economic decisions of firms and individuals. How prices, wages and profits are determined, resources are allocated and income is distributed. Topical subjects (e.g., energy policy and health care).

201. Economic History of Europe
First semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113 (112 may be taken concurrently). Open to sophomores or higher. *Cosgel, Langlois*
Economic evolution of Europe from feudal times to the present, emphasizing the modern period: the rise of commerce, industry, and banking; the growth of population and the labor force; the changing position of agriculture; business fluctuations; and forms of economic organization.

201W. Economic History of Europe
Prerequisite: ECON 111 and 112, or 102 or 113 (112 may be taken concurrently); ENGL 105 or 110 or 111 or 250. Open to sophomores or higher.

202. Topics in Economic History and Thought
Either semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113 or instructor consent. May be repeated for credit, with change of topic. *Carstensen, Cosgel, Langlois, Minkler, Suzanna*
Special topics in economic history, the history of economic thought, the philosophy and methodology of economics, or alternative economic theories.

202W. Topics in Economic History and Thought
Prerequisite: ECON 111 and 112, or 102 or 113 or instructor consent: ENGL 105 or 110 or 111 or 250.

203. Economic History of the United States
Second semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113 (112 may be taken concurrently). Open to sophomores or higher. Carstensen

Issues in American economic development, including the political economy of the Constitution, the economics of slavery, the rise of modern corporations and the causes of the Great Depression.

203W. Economic History of the United States
Prerequisite: ECON 111 and 112, or 102 or 113. (112 may be taken concurrently); ENGL 105 or 110 or 111 or 250. Open to sophomores or higher.

204. Economic History of the Middle East
First semester. Three credits. Prerequisites: ECON 111 and 112, or 102 or 113. (112 may be taken concurrently). Open to sophomores or higher. Cosgel

Economic history of the Middle East, including the organization of rural and urban activity, relationship with Western Europe, and the roles of international trade, foreign capital, petroleum, and institutional structure in economic development.

204W. Economic History of the Middle East
Prerequisites: ECON 111 and 112, or 102 or 113. (112 may be taken concurrently); ENGL 105 or 110 or 111 or 250. Open to sophomores or higher.

205. History of Economic Thought
Second semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113. Cosgel, Cunningham, Langlois

The evolution of economic ideas significant to their own times and to the state of current theory. Mainly nineteenth and twentieth century thinkers.

205W. History of Economic Thought
Prerequisite: ECON 111 and 112, or 102 or 113; ENGL 105 or 110 or 111 or 250.

206. Philosophy and Economics
(Also offered as PHIL 245.) Either semester. Three credits. Prerequisite: ECON 102 or 112 or 113.

An examination of the normative assumptions and implications of modern economics (for example, the connections between Classical Utilitarianism and Welfare Economics). Attention to methodological controversies in contemporary economic theory.

207. Beyond Self-Interest
First semester. Three credits. Prerequisite: ECON 102 or 112 or 113. Minkler

A contrast to the assumptions, values, methodology, and philosophical underpinnings of mainstream economic analysis. Altruism, role of social norms and culture, importance of work, moral assessment of economic systems, feminist and ecological economics.

207W. Beyond Self-Interest
Prerequisite: ECON 102 or 112 or 113; ENGL 105 or 110 or 111 or 250.

212V. Empirical Methods in Economics I (Q,C)
Second semester. Three credits. Two class periods and one 2-hour laboratory period. Prerequisite: ECON 111 and 112, or 102 or 113; and MATH 106Q or 113Q or 115Q or 118Q; and STAT 100V or STAT 110V. Open to sophomores or higher. A course recommended for all students majoring in economics. Couch, Lott, Ray

Introduction to the empirical testing of economic theories. Student projects testing simple economic models.

213Z. Empirical Methods in Economics II (W,Q,C)
Second semester. Three credits. Prerequisite: ECON 212V; ENGL 105 or 110 or 111 or 250. Lott, Ray

Analysis of economic time series, estimation of single- and simultaneous-equation economic models, and statistical decision theory.

214Q. Mathematical Economics
First semester. Three credits. Prerequisite: ECON 111, 112, or 102 or 113; MATH 106Q or 113Q or 115Q or 118Q. Heffley, Knoblauch, Lott, Ray, Segerson

Application of mathematical techniques to economic problems. Methods studied: set theory, linear algebra, equilibrium analysis, unconstrained and constrained optimization, comparative statics, and linear programming.

216V. Operations Research (Q,C)
First semester. Three credits. Two 75-minute classes per week. Seven of the classes will be held at the computer lab. Prerequisite: MATH 101 or passed Q Readiness Test or passed Q course. Recommended preparation: ECON 111, 112, or 102 or 113. Sacks

Extensive use of computer and software packages to find efficient solutions to problems faced by managers in both the public and private sectors. Optimization of input and output mixtures, of delivery routes, and communication networks.

217. Information Technology for Economics
Either semester. Three credits. Prerequisites: ECON 111, 112, or 113; and STAT 100V or 110V. Ahking, Cosgel, Sacks

The presentation of economic data and testing of economic theory through the use of appropriate computer based tools. Analysis of macroeconomic concepts such as the consumption function, influence of the money supply, budget deficits, and interest rates on macroeconomic equilibrium, and the tradeoffs between unemployment and inflation. Analysis of microeconomic concepts such as demand, supply, elasticity, the achievement of equilibrium price and quantity, and analysis of several industries and the stock market. Analysis of historical data such as aggregate and specific price levels, sectoral shifts in the economy, and changes in income distribution.

218. Intermediate Microeconomic Theory
Either semester. Three credits. Prerequisite: ECON 102 or 112 or 113. Recommended preparation: ECON 111 and one of MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Open to sophomores or higher. Cosgel, Heffley, Kimenyi, Knoblauch, Lott, Miceli, Minkler, Randolph, Ray, Sacks, Segerson

Intermediate microeconomic theory, covering demand and supply, exchange and production, pricing, and welfare economics.

218Q. Intermediate Microeconomic Theory
Prerequisite: ECON 102 or 112, or 113; MATH 106Q or 113Q or 115Q or 118Q. Recommended preparation: ECON 111. Open to sophomores or higher. Knoblauch, Randolph, Segerson

Applies mathematical techniques to intermediate microeconomic theory.

219. Intermediate Macroeconomic Theory
Either semester. Three credits. Prerequisite: ECON 102 or 111 or 113; MATH 106Q or 113Q or 115Q or 118Q. Recommended preparation: ECON 112 and one of MATH 106Q, 113Q, 115Q, 118Q or 120Q. Open to sophomores or higher. Ahking, Allen, Cunningham, Morand

Intermediate macroeconomic theory, covering national income accounting; the determination of aggregate output, employment and price levels; elements of business cycles and economic growth.

219Q. Intermediate Macroeconomic Theory
Prerequisite: ECON 102 or 111 or 113; MATH 106Q or 113Q or 115Q or 118Q. Recommended preparation: ECON 112. Open to sophomores or higher. Ahking, Cunningham, Morand

Applies mathematical techniques to macroeconomic theory.

220. Economics of Taxation and Government Spending
Either semester. Three credits. Prerequisite: ECON 102 or 112 or 113. Recommended preparation for students who have completed ECON 112: ECON 111. Open to sophomores or higher.

Critical issues in taxation and government expenditures. Emphasis on institutions and public policy. Topics include: rationale for and effects of progressive taxation, reform of the tax system, Social Security and Medicare, welfare reform, defense, and fiscal federalism.

221. Urban Development and Policy
Second semester. Three credits. Prerequisite: ECON 112 or 102.

Education, housing, anti-poverty, economic development, and transportation policies for American cities and metropolitan areas. Emphasis on different roles of policies that act upon people versus places. Analysis tools for regional economic development such as input-output matrices and cost-benefit analysis.

222. Economics of Poverty
(Formerly offered as ECON 257.) First semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113. Open to sophomores or higher. Kimenyi

Analysis of poverty and income maintenance programs: theories of income distribution and comparison of public policies in the U.S. and other countries.

224. Women and Minorities in the Labor Market
(Formerly offered as ECON 279.) First semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113. Open to sophomores or higher. Kimenyi, Randolph

Issues and problems confronting women and minorities in the workplace, using economic theory, institutional analysis, and empirical investigation. Historical background, allocation of time, discrimination, earnings determination, occupational structure, labor unions, and public policy.

225. Labor Economics
(Formerly offered as ECON 274.) Second semester. Three credits. Prerequisite: ECON 112, or 102 or 113. Recommended preparation: ECON 218. Open to sophomores or higher. Barth, Couch, Kimenyi

Economics of labor: human capital theory, discrimination, unemployment, manpower policy, and trade unions.

225W. Labor Economics
(Formerly offered as ECON 274W.) Prerequisite: ECON 112, or 102 or 113; ENGL 105 or 110 or 111 or 250. Recommended preparation: ECON 218. Open to sophomores or higher.

226. Labor Legislation
(Formerly offered as ECON 276.) Second semester. Three credits. Prerequisite: ECON 112, or 102 or 113. Open to sophomores or higher. Barth

Legal status of labor, unorganized and organized, in legislation and court decisions. Emphasis on the labor contract, bargaining procedures, and union and employer tactics. Also, legislation dealing with wages, hours, child labor, old-age benefits, and accident and unemployment compensation.

228. Transitional Economies of Russia and Eastern Europe
(Formerly offered as ECON 244.) First semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113. Open to sophomores or higher. Allen

Economic transition of these formerly socialist
230. Money and Banking
Either semester. Three credits. Prerequisite: ECON 111 and 112, or 102 or 113. Open to sophomores or higher. Akhing, Cunningham, Lott

The nature of money, the origins of monetary standards and systems, the development and operation of commercial banking, the Federal Reserve System, and international monetary agencies.

232. Government and Industry
(Formerly offered as ECON 264.) Second semester. Three credits. Prerequisite: ECON 112, or 102 or 113. Open to sophomores or higher. Langlois, Minkler

Relations between government and business. Public policies enforcing, supplementing, or replacing competition in particular markets, studies of selected industries and legal cases.

233. Economics of the Oceans
Either semester. Three credits. Prerequisite: ECON 102 or 112 or 102 or 113. Recommended preparation for those students who have passed ECON 111. Open to sophomores or higher.

Economies of industries that use and manage ocean resources. Applications of industrial organization, law and economics, natural resource theory, and environmental economics.

237. Special Problems in Money and Banking
(Formerly offered as ECON 231.) Second semester. Three credits. Prerequisites: ECON 230, and 219 or 219Q. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Not open for credit to students who have passed ECON 231. Akhing

Emphasis on public policy: commercial bank regulations; the relation of liquidity to economic fluctuations; government lending agencies; and central bank policies and credit control.

242. International Trade
Either semester. Three credits. Prerequisite: ECON 218 or 218Q. Recommended preparation: ECON 111 or 102 or 113, and one of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Recommended preparation for students with a minimum of 2.5 in 200-level economics courses. Must be given for one course without the other. Students taking this course must secure a satisfactory intern position before the end of the second week of the semester of enrollment in this course. They should begin consultation with the instructor several months in advance. Does not count toward the economics major. Must be taken concurrently with ECON 295; no credit will be given for one course without the other. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory). Sazama

Economic analysis of the trade sector: organization and performance of health care delivery systems; economic behavior of patients and providers; markets for health services; health-care finance and insurance; health-care policy; and cost-benefit analysis of health-care programs.

247. Economic Development
Either semester. Three credits. Prerequisites: ECON 111, or 112 or 102 and 113 or 218 or 218Q. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Randolph

Economics of problems facing developing nations: theories of development, and strategies and policies to promote economic development.

247W. Economic Development
Prerequisites: ECON 111 or 102, or 113 and 218 or 218Q. ENGL 105 or 110 or 111 or 250. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q.

253. Public Finance
Either semester. Three credits. Prerequisites: ECON 218 or 218Q. Recommended preparation: ECON 111, 102, and 113, and one of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Kimenyi, Miseci, Sacks, Sazama, Sersgen


258W. Contemporary Problems in Economics
Either semester. Three credits. Prerequisites: ECON 218 and 219 (one of which may be taken concurrently); ENGL 105 or 110 or 111 or 250. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q.

The nature of microeconomic and macroeconomic issues; the relation of liquidity to economic fluctuations; government lending agencies; and central bank policies and credit control.

259. Urban and Regional Economics
(Also offered as URBN 259.) Second semester. Three credits. Prerequisite: ECON 218 or 218Q. Recommended preparation: ECON 111, 102 or 113 and one of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Heffley, Minkler

Economic problems of cities and regions: urban markets for land, labor, and housing; location decisions of businesses and households; metropolitan transportation problems; urban/suburban fiscal relations; urban and regional environmental quality; and the economics of crime.

259W. Urban and Regional Economics
Prerequisite: ECON 218 or 218Q. ENGL 105 or 110 or 111 or 250. Recommended preparation: ECON 111, 102 or 113 and one of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q.

261. Health Economics
Second semester. Three credits. Prerequisite: ECON 218 or 218Q. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, or 120Q. Heffley

Economic analysis of the health sector: organization and performance of health care delivery systems; economic behavior of patients and providers; markets for health services; health-care finance and insurance; health-care policy; and cost-benefit analysis of health-care programs.

267. Organization of Industry
First semester. Three credits. Prerequisite: ECON 218 or 218Q. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Knoblauch, Langlois, Minkler

The nature of competition and economic organization. Competitive effects of business practices, and their influence on price, production, and technological change.

270. Economics of the Law
Either semester. Three credits. Prerequisite: ECON 218 or 218Q. Recommended preparation: ECON 111, or 102 or 113 and one of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Langlois, Miceli

The law as an economic institution. Primary focus on the Common Law, property, tort, and contract. Applications to pollution control, land-use, hazardous wastes, product liability, and worker safety. Ethical as well as economic approaches to the law.

275. Theory of Labor Markets
Either semester. Three credits. Prerequisite: ECON 218 or 218Q. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. Barth, Couch, Kimenyi

Theoretical analysis of labor markets: labor supply and demand; wage differentials; human capital; and the inflation-unemployment tradeoff.

286W. Seminar in Economics
Either semester. Three credits. Prerequisite: ECON 218 and 219 (one of which may be concurrent); ENGL 105 or 110 or 111 or 250. Recommended preparation: One of: MATH 106Q, 113Q, 115Q, 118Q, or 120Q.

Special topics in micro- and macroeconomic theory, applications, and testing. Recommended for capable students who are motivated to develop and extend their knowledge of economics in creative ways. Required for Honors Scholars in Economics, Economics Scholars, and Candidates for a Degree with Distinction in Economics.

289W. Senior Thesis in Economics
Either semester. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ECON 286W or consent of the Department Honors Advisor; ENGL 105 or 110 or 111 or 250.

The student should define a general subject area for the thesis before choosing a thesis advisor and seeking consent at the time of registration. The student should then submit a written proposal for the senior thesis to the advisor by the end of the semester preceding enrollment for thesis credit.

293. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head required, prior to student’s departure. May count toward the major with consent of the advisor.

Special topics taken in a foreign study program.

294. Internship – Field Study
Either semester. Two credits. Hours by arrangement. Consent of instructor is required. Students must have: nine credits of 200-level economics courses (six of which may be concurrent). Students must be at least 6th-semester and have a minimum GPA of 2.25 or a minimum of 2.5 in 200-level economics courses. Students must secure a satisfactory intern position before the end of the second week of the semester of enrollment in this course. They should begin consultation with the instructor several months in advance. Does not count toward the economics major. Must be taken concurrently with ECON 295; no credit will be given for one course without the other. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory). Sazama

Internship with a business firm, government agency or non-profit organization. Evaluation by the field supervisor and by the instructor (based on a detailed written report submitted by the student).

295. Internship – Research Paper
Either semester. One credit. Hours by arrangement. Consent of instructor required. Students must have: nine credits of 200-level economics courses (six of which may be concurrent). Students must be at least 6th-semester and have a minimum TGPA of 2.25 or a minimum of 2.5 in 200-level economics courses. Must be taken concurrently with ECON 294; no credit will be given for one course without the other. Sazama

Research paper of 3,000-4,000 words on approved topic related to the internship field study.

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Education (EGEN)

294. Seminar/Clinic: The Student as Learner
First semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.
Integration of the concepts of learning, special needs, and technology with clinical experiences.

295. Seminar/Clinic: The Student in the School Context
Second semester. One credit. Prerequisite: EGEN 294. Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.
Integration of concepts of linguistic diversity, social and community issues, and exceptionality with clinical experiences.

296. Seminar/Clinic: Methods of Teaching
First semester. Three credits. Prerequisite: EGEN 295. Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.
Integration of concepts of learning assessment and exceptionality with area specific methods.

296W. Seminar/Clinic: Methods of Teaching
Prerequisite: EGEN 295; ENGL 105 or 110 or 111 or 250.

297. Seminar/Clinic: Analysis of Teaching
Second semester. Three credits. Prerequisite: EGEN 296 and open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.
Analysis of instructional concepts and implementation in the clinical setting. Relationship of instruction to theory and implications for instructional evaluation are stressed.

298. Honors Seminar
Either semester. Three credits. Restrictions: Students must be accepted by the School of Education Honors Committee as candidates for Degrees with Distinction, Honors Scholars, or University Scholars. Can be repeated for credit.

299. Independent Study: Honors Thesis Preparation
Either semester. Three credits. Restrictions: Students must be accepted by the School of Education Honors Committee as candidates for Degrees with Distinction, Honors Scholars, or University Scholars. Can be repeated for credit.

Education Curriculum and Instruction (EDCI)

Head of Department: Professor Mary Anne Doyle
Department Office: Room 315, Gentry Building

201. Introduction to Teaching
First semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.
Introduction to the University of Connecticut’s Integrated Bachelor’s/Master’s Teacher Preparation Program. Includes the philosophical and theoretical foundations of the program, its structure and components, the nature and purposes of schooling, the relationship of the school and society, and recent educational reform movements, including the work of the Holmes Group and John Goodlad’s National Network for Educational Renewal, and the nature and purposes of “reflective practice” for the educational professional.

204. Introduction to Bilingual-Bicultural Education
Semester by arrangement. Three credits. Prerequisites: EGEN 294 and EGEN 295. Doyle, Irwin, Kaufman
An introduction to the principles and practices of teaching reading in the elementary school. Field experience may be included.

211. Curriculum and Teaching of Reading
Semester and hours by arrangement. Variable credits, not to exceed three. Prerequisite: EGEN 294 and EGEN 295. Doyle, Irwin, Kaufman
An introduction to the principles and practices of teaching reading in the elementary school. Field experience may be included.

212. Introduction to Outdoor Education
Semester and hours by arrangement. Three credits. Goodkind
An introduction to the elements and philosophy of outdoor education. The development of knowledge, understanding and appreciation of educational values inherent in the natural environment.

220. Teaching the Language Arts in the Elementary School
Second semester. Three credits. Prerequisite: Open only to Elementary Education and Special Education majors. Doyle, Irwin, Kaufman
A study of current theory and approaches to teaching the language arts effectively by connecting the teaching of speaking, listening, reading, and writing and by integrating this instruction with children’s literature and content learning. Field experiences may be included.

221. Teaching Reading and Writing in the Elementary School
First semester. Three credits. Prerequisite: Open only to Elementary Education and Special Education majors. Doyle, Irwin, Kaufman
An introduction to the teaching of reading and writing in the elementary school. Field experiences may be included.

222. Teaching Mathematics in the Elementary School
First semester. Two credits. Prerequisite: Open only to Elementary Education and Special Education majors. DeFranco, McGivney-Burelle
A study of current approaches to teaching and learning mathematics. Opportunities will be provided for participants to develop an awareness and knowledge of the Standards for Teaching School Mathematics.

223. Teaching Science in the Elementary School
First semester. Two credits. Prerequisite: Open only to Elementary Education and Special Education majors. Moss
A study of curriculum materials, laboratory experiences and teaching techniques in science.

224. Teaching Social Studies in the Elementary School
First semester. Two credits. Prerequisite: Open only to Elementary Education and Special Education majors.
A study of the organization of learning experiences and teaching methods emphasizing the social sciences as the foundation of the social studies.

231. Sociolinguistic Diversity and the Classroom
Second semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Osborn, Reagan
A basic overview of the role of language in the educational process, and the educational implications of language diversity, as one component of multicultural diversity, in the classroom. Topics include the nature and elements of human language, prescriptive and descriptive approaches to language study, first and second language acquisition, language variation and its social and educational implications, the relationship between language and culture, and foreign and second language education, including bilingual and English as a Second Language programs.

232. Foundations of Education: Philosophical Tools for Teachers
Second semester. One credit. Prerequisite: Open only to students in the Music Education Teacher Preparation Program. Reagan
Philosophical trends in schooling, and applications of philosophy for prospective teachers.

233. Social and Community Issues in Education
Second semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Mannhebach
Social and community issues, including the effect of alcohol, drugs and tobacco, confronting teachers in contemporary society.

258. Methods in Elementary School Music
Semester by arrangement. Three credits. Prerequisite: Satisfactory progress in applied music, and consent of instructor.

260. Methods of Foreign Language Instruction, Pre K-12
First semester. Three credits. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Osborn, Reagan
Selection and organization of learning experiences, instructional activities and materials, and methods of teaching foreign language in pre K-12 settings. Course activities include a combination of lecture, seminar and clinical experiences in local schools.

262. Directed Observation and Participation
Credits by arrangement, not to exceed three. Open only with consent of instructor. This course may be taken for more than one semester.
This course gives prospective teachers an opportunity to see secondary and elementary school teachers and pupils in action, to discuss with supervisors and teachers problems related to work in designated field, and to study school resources from the standpoint of good teaching.
266. Instruction and Curriculum in the Secondary School
Semester and hours by arrangement. Variable credit not to exceed 6. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.

A study of the selection and organization of learning experiences, instructional materials and teaching methods. Course activities will include a combination of lecture, seminar, and clinical experiences in local schools.

272. The Teaching of Reading in Middle and High Schools
Semester and hours by arrangement. Variable credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Irwin

Methods of teaching reading to middle and high school students.

273. Teaching Reading and Writing in the Content Areas
Second semester. Two credits. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Irwin

A study of the role of reading and writing in the learning of the content areas taught in secondary schools.

276. Directed Student Teaching
Either semester. Credits and hours by arrangement. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Application, signed by the advisor, must be made to the Coordinator of Student Teaching for the fall semester prior to March 1; for the spring semester prior to October 1.

Student teaching in selected elementary schools. Provides opportunity for students to observe teaching, to develop teaching skills through practice, and to engage in other school activities for which elementary teachers are responsible.

277. Directed Student Teaching
Either semester. Credits and hours by arrangement. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Application, signed by the advisor, must be made to the Coordinator of Student Teaching for the fall semester prior to March 1; for the spring semester prior to October 1.

Class meetings providing orientation to student teaching followed by teaching in schools supervised by a member of the staff of the Curriculum and Instruction Department. It is the policy of the department to extend its practice-teaching opportunity to a point sufficient to indicate adequately a student’s teaching ability and aptitude.

287. Computer Literacy
Either semester. Variable credit, not to exceed three. Prerequisite: Admission to the Neag School of Education.

This course will provide an introduction to the nature, functioning and application of microcomputers. The major languages typically used with microcomputers will be surveyed.

288. Variable Topics
Either semester. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit.

299. Independent Study for Undergraduates
Either semester. Credits and hours by arrangement. Prerequisite: Open only to juniors and seniors with appropriate background for the study of education. Students must present the instructor with a problem well laid out for investigation. May be repeated for credit with a change in content.

298. Variable Topics
Second semester. Two credits. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Irwin

A study of the various aspects of camping: the staff; campers; program; site and facilities; management, business and finance; support services; and marketing.

Education Kinesiology (EKIN)

Head of Department: Professor Carl M. Maresh
Department Office: Room 223, Sports Center

For major requirements, see the Neag School of Education section of this Catalog.

160. Courses in Lifetime Sports Program
(Formerly offered as ESLE 160.) Either semester. One credit. Two periods/week. Open to all University students. This course may be repeated with change of activity and/or skill level. Not to exceed 2 credits towards graduation.

Students in the Department of Kinesiology may take up to six different activities for six credits toward graduation.

A variety of lifetime sports and skills are offered. The teaching of each activity will be geared to individual, dual, and team activities. The Lifetime Sports Program (EKIN 160) in the Neag School of Education, Department of Kinesiology, accommodates students who have physical disabilities in the least restrictive environment possible. Participants requiring accomodations should contact the Program Coordinator at (860) 486-3623.

161. Introduction to Athletic Injuries I
First semester. First seven weeks. One credit. Prerequisite: Open only to Pre-Athletic Training students who are sophomores or higher. Howard

A survey class to explore general considerations of recognizing and treating athletic injuries. This section covers training and conditioning, nutrition, environment, and legal issues.

162. Introduction to Athletic Injuries II
First semester. Second seven weeks. One credit. Prerequisite: Open only to Pre-Athletic Training students who are sophomores or higher. Howard

A survey class to explore general considerations of recognizing and treating athletic injuries. This section covers tissue healing, rehabilitation, modalities, taping, and bandaging.

163. Introduction to Athletic Injuries III
Second semester. First seven weeks. One credit. Prerequisite: Open only to students in Kinesiology programs.

A survey class to explore general considerations of recognizing and treating athletic injuries. This section covers the lower extremity.

164. Introduction to Athletic Injuries IV
Second semester. Second seven weeks. One credit. Prerequisite: Open only to students in Kinesiology programs.

A survey class to explore general considerations of recognizing and treating athletic injuries. This section covers the upper extremity, head, face, neck, abdomen, thorax, and spine.

201. The Camping Experience
(Formerly offered as ESLE 201.) Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Morrone

A study of the various aspects of camping: the staff; campers; program; site and facilities; management, business and finance; support services; and marketing.

202. Theory of Coaching
First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Morrone

This course focuses on the development of both a coaching philosophy and the skills necessary to develop as a coaching professional. Various coaches, professors and guest speakers provide insight into the essential elements of coaching, including technical training, tactical awareness, physical fitness and psychological preparation.

204. Principles of Recreational Service
(Formerly offered as ESLE 204.) First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Servedio

The evolution of present day recreational service, and basic concepts.

205. Introduction to Therapeutic Recreational Service
(Formerly offered as ESLE 205.) First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Shivers

Recreational Rehabilitation for special populations. The practice of therapeutic recreational service for clients in treatment centers or communities.

206. Sport Administration I
First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Morrone

This course focuses on the many administrative roles the coach assumes when developing, maintaining and/or improving a sports program entrusted to him/her. The coach; the athlete; the program; facilities and equipment; academic and financial aid; scouting and recruiting; and the media will be emphasized by professors, coaches and guest speakers.

207. Sport Administration II
Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs and EKIN 206. Morrone

This course focuses on the many administrative roles the coach undertakes to involve the community in his/her sports program. The role of support groups; sport organizations; leagues and conferences; camps and clinics; local community relations; along with the relevance of youth, amateur and professional competition; are considered in depth by professors, coaches and guest speakers.

208. Skill Acquisition in Team Sports
First semester. Two credits. Prerequisite: Open only to students in Kinesiology programs.

This course is designed to provide fundamental skills and tactical theories in various team sports.

209. Skill Acquisition in Individual Sports
Second semester. Two credits. Prerequisite: Open only to students in Kinesiology programs.

This course is designed to provide fundamental skills and tactical theories in various individual sports.

210. Exercise and Sport Science for Coaches
First semester. Four credits. Prerequisite: Open only to students in Kinesiology programs. Van Heest

This course is designed to provide fundamental physiological principles and their application to coaching competitive athletics.

230. Nature and History of Sport
(Formerly offered as ESLE 230.) First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Hurwitz

Historical perspective of sport: ancient and modern Olympics, physical education, collegiate sports, participation by women.

234. Rehabilitation of Athletic Injuries
(Formerly offered as ESLE 234.) First semester. Three credits. Prerequisite: Open only to students in Athletic
Training.

THE multi-dimensional approaches to rehabilitation of athletic injuries. The restoration of strength, range-of-motion, neuromuscular control, balance, cardiovascular endurance, and other components will be covered as it applies to specific athletic injuries.

236. Sport and Society
(Formerly offered as ESLE 236.) First semester. Three credits. Prerequisite: SOCI 107 or 107W, or SOCI 115 or 115W and open only to students in Kinesiology programs. Yiannakis

Sport as an institution. Sociological issues involving gender, race, and intercollegiate, professional, and children’s sports.

236W. Sport and Society
(Formerly offered as ESLE 236W.) First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs; ENGL 105 or 110 or 111 or 250.

239. Therapeutic Modalities for Athletic Injuries
Second semester. Three credits. Prerequisite: Open only to students in Athletic Training.

Techniques and rationale pertaining to treatment and prevention of athletic injuries through the modalities of heat, cold, electricity, massage, ultrasound, and others. Also, the pharmacology of therapeutic medications.

248. Physiological Systems in Human Performance
(Formerly offered as ESLE 248.) First semester. Three credits. Prerequisite: PNB 264-265 and open only to students in Kinesiology programs. Armstrong, Maresch, Van Heest

An organ systems approach to optimal human performance including metabolism, energy transfer, nerve transmission, muscle contraction, endocrine control, and cardiopulmonary physiology.

249. Pathophysiology and Pharmacology for Athletic Trainers
Second semester. Three credits. Prerequisite: Open only to students in Athletic Training.

The focus of this class is the pathophysiology and pharmacology as it relates to athletic injuries. Specifically, the injury and repair process of skin, muscle, bone, ligaments, tendons, and cartilage. The pharmacology of therapeutic medications and performance enhancing substances will be covered.

250. Clinical Instruction for Athletic Trainers I
Second semester. Three credits. Prerequisite: Open only to students in Athletic Training.

Hands on instruction/demonstration/practice/implementing of basic emergency procedures, training room procedures, and taping/bracing/wound care procedures. Also, the first of four practical field experiences.

251. Clinical Instruction for Athletic Trainers II
First semester. Three credits. Prerequisite: Open only to students in Athletic Training. Moye

Hands on instruction/demonstration/practice/implementing of basic rehabilitation modalities and conditioning procedures. Also, the second of four practical field experiences.

252. Clinical Instruction for Athletic Trainers III
First semester. Three credits. Prerequisite: Open only to students in Athletic Training. Fidale

Hands on instruction/demonstration/practice/ implementing of basic evaluation and treatment procedures of specific body regions. Also, the third of four practical field experiences.

253W. Current Research and Issues in Athletic Training
First semester. Three credits. Prerequisite: Open only to students in Athletic Training: ENGL 105 or 110 or 111 or 250. Casa

Acquaint students with the recent research in the field, the components of conducting and publishing research in the field, and preparation for research endeavors at the graduate level. Additionally, important issues relevant to the athletic training profession will be explored and discussed.

254. Athletic Training Administration
Second semester. Three credits. Prerequisite: Open only to students in Athletic Training.

Administrative/Management concerns for the athletic trainer. Insurance, budgeting, counseling, facility design, hiring, record keeping, and other issues will be covered.

255. Health and Medicine
First semester. Three credits. Prerequisite: Open only to students in Athletic Training.

Knowledge, skills, and values that a health professional must possess to recognize, treat, and refer, when appropriate, the general medical conditions and disabilities of athletes and others involved in physical activity.

257. Strength and Conditioning for Athletic Trainers
(Formerly offered as ESLE 257.) Second semester. Three credits. Prerequisite: Open only to students in Athletic Training.

The focus of this class is the prevention of athletic injuries via the proper implementation of strength and conditioning principles. To include frequency, intensity, recovery, periodization, components of a fitness program, ergogenic aids, and protective bracing.

258. Mechanisms and Adaptations in Sport and Exercise
(Formerly offered as ESLE 258.) Second semester. Three credits. Prerequisite: PNB 264-265 and open only to students in Kinesiology programs. Armstrong, Maresch, Van Heest

An applied approach to the physiological mechanisms and adaptations influencing sport and exercise: optimal nutrition, body composition, exercise training, ergogenic aids, aging, cardiovascular health, and environmental factors.

259W. Fitness Management
(Formerly offered as ESLE 259W.) Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs; ENGL 105 or 110 or 111 or 250. Casa, Van Heest

Health fitness programming; a management perspective.

260. Assessment of Athletic Injuries
(Formerly offered as ESLE 260.) Second semester. Three credits. Prerequisite: Open only to students in Athletic Training.

Techniques and procedures that athletic trainers use to evaluate injuries in the extremities. Includes history, observation, palpation, special tests, manual muscle testing, blood flow, nerve function, and other injury specific skills.

262. Directed Observation and Participation
(Formerly offered as ESLE 262.) Credits by arrangement. Prerequisite: Open only to students in Kinesiology programs. May be taken more than one semester, but total credits cannot exceed three. Prior to registration, students must apply for Directed Observation and provide for their own transportation.

Mentors include educators, recreationists, athletic trainers, sport professionals.

263. Applied Anatomy and Kinesiology
(Formerly offered as ESLE 263.) Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Van Heest

Human anatomy and its application to physical activity, exercise and sport.

265. Fundamentals of Resistance Training
Either semester. Four credits. Prerequisite: Open only to students in Kinesiology programs. Kraemer

Coaching professionals must have the knowledge, skills, and understanding of the scientific principles on which to design individualized resistance training programs needed for optimal performance and injury prevention.

266. Physiological Assessment of Competitive Athletics
Second semester. Three credits. Prerequisite: EKIN 248 and 258. Open only to students in Kinesiology programs. Van Heest

The course focuses on the development of analysis techniques of human physiology specific to competitive athletes. The course will include both laboratory and field methods to evaluate aerobic ability, anaerobic ability, flexibility, muscular strength and power and body composition. It requires a strong foundation in musculoskeletal anatomy and physiology. The course is designed to better prepare the student for development of scientifically sound coaching practices.

272. Sport Biomechanics
(Formerly offered as ESLE 272.) First semester. Three credits. Prerequisite: PHYS 101Q or 121Q. PNB 264-265 and open only to students in Kinesiology programs.

Qualitative analysis of linear and angular motion, force and torque, momentum, energy, equilibrium, projectiles, aerodynamics.

280. Recreational Services for the Mentally Ill
(Formerly offered as ESLE 280.) First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Shivers

Planning, implementation, program evaluation, and treatment team functions for clients, using systematic practice.

281. Introduction to Sport Marketing
(Formerly offered as ESLE 281.) Second semester. Three credits. Prerequisite: ECON 111, 112 and open only to students in Kinesiology programs.

This course introduces the basic concepts, principles, and tools for sport marketing.

282. The Sociology of Leisure
(Formerly offered as ESLE 282.) Second semester. Three credits. Prerequisite: SOCI 107 or 107W or SOCI 115 or 115W and open only to students in Kinesiology programs. Yiannakis

An examination of the functions of leisure (& tourism) for the individual, with special emphasis on life satisfaction, self actualization over the life course, gender issues, and societal constraints with regard to leisure satisfaction.

283. The Organization of Recreational Services
(Formerly offered as ESLE 283.) Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Servedio

Programming activities in public and private agencies emphasizing personnel needs, facilities, marketing, and organization.

284. Introduction to Recreational Service Administration
(Formerly offered as ESLE 284.) First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Servedio
Management practices, legal issues, budgeting, and supervision.

285. Therapeutic Recreational Service for the Physically Disabled and the Neurologically Impaired
(Formerly offered as ESLE 285.) Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Shivers
Adaptive programming for clients with permanent disabilities.

286. Issues in Sport
(Formerly offered as ESLE 286.) Either semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Morrone
The study of socio-cultural, economic, political, and other related issues in sport.

289. Leadership in Recreational Services
(Formerly offered as ESLE 289.) Second semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Shivers
Group dynamics and interpersonal behavior theories with leadership techniques for field application.

289W. Leadership in Recreational Services
Prerequisite: Open only to students in Kinesiology programs; ENGL 105 or 110 or 111 or 250. Casa

290. Internship
(Formerly offered as ESLE 290.) Either semester or summer. Variable credits. Prerequisite: In accordance with departmental policy, students will have completed all academic course work in their concentration excluding Athletic Training prior to undertaking the internship. May be repeated for credit. Open only to students in Kinesiology programs.
Field service or experiences in cooperating agencies.

292. Emergency Procedures in Athletic Training
(Formerly offered as ESLE 292.) First semester. Three credits. Prerequisite: Open only to students in Athletic Training. Casa
Evaluation and treatment skills for athletic injuries to the head, face, neck, trunk, spine, thorax, and abdomen. Acute first-aid considerations in life-threatening situations will also be covered in-depth.

295. Introduction to Honors Research
Both semesters. Three credits. Prerequisite: Open only to Honors Students in Kinesiology programs. The student will meet with EKIN faculty members and attend laboratory/program staff meetings to survey the opportunities available for future Honors Thesis research.

296. Honors Literature Review
Both semesters. Three credits. Prerequisite: Open only to Honors Students in Kinesiology programs. The student will identify specific Honors Thesis research questions and will write a research paper that will serve as the thesis Literature Review.

297W. Honors Thesis
Both semesters. Three credits. Prerequisite: Open only to Honors Students in Kinesiology programs; ENGL 105 or 110 or 111 or 250. The student will collect and interpret data and will write the Honors Thesis, completing work begun during EKIN 296.

298. Variable Topics
(Formerly offered as ESLE 298.) Either semester. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit with a change in content.

299. Independent Study for Undergraduates
(Formerly offered as ESLE 299.) Either semester. Credits and hours by arrangement. Open only to seniors with consent of the Department. May be repeated for credit with a change in content.
Laboratory or library research to expand understanding of a specialized topic in sport, leisure, or exercise sciences.

Educational Leadership (EDLR)

Head of Department: Professor Edward F. Iwanicki
Department Office: Room 406, Gentry Building
For major requirements, see the Neag School of Education section of this Catalog.

250. Experiential Learning and Education
First semester. Three credits.
Experiential learning, individual values, personality characteristics. Learning as a life-long process, adult transition research.

251. Introduction to Organizations and Human Resources Education
Either semester. Three credits.
Theories and principles of organizations and organizational behavior as they relate to human resources development in education.

252. Introduction to Management and Human Resources Education
Either semester. Three credits.
Issues and tasks of human resources management (HRM) in educational settings. Theory and practice.

253. Introduction to Planning and Evaluation and Human Resources Education
Either semester. Three credits.
Planning and evaluating human resources management subsystems in educational settings, staffing, organizational development, compensation and benefits, labor relations, communication, training and development, supervision and information systems.

254. Introduction to Budget Planning and Human Resources Education
Either semester. Three credits.
Comprehensive budgeting, profit planning and control applied to human resources development. Fiscal management problems, budget planning in educational programs.

255. Contemporary Labor Issues
Either semester. Three credits. May be repeated for credit, not to exceed 6 credits.
Labor issues in work organization, employees, and the labor movement. Patterns of jobs and career problems of labor organizations. Role of multi-national corporations in changing the job mix, collective bargaining.

282. College Freshmen: Their Characteristics and Their Adjustment to College Life
Second semester. Three credits. Prerequisite: Consent of instructor.
Personal and social characteristics of college freshmen; adjustment to college life. Techniques for successful transitions.

283. Student Organization Leadership
Three credits. Prerequisite: Consent of instructor.
Examination of leadership issues and development of skills in leading organizations. Experiential application to student’s current co-curricular involvement in UConn clubs and organizations.

291. Practicum: Black Experience in Education
Either semester. Not to exceed three credits. Hours by arrangement. Prerequisite: Consent of instructor.
Experiences, cooperatively arranged by the department, with an educational agency that addresses issues and problems of importance to Black people.

298. Variable Topics
Either semester. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit with a change in content.

299. Independent Study for Undergraduates
Either semester. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit with a change in content.

Educational Psychology (EPSY)

Head of Department: Professor Sally Reis
Department Office: Room 210, Gentry Building
For major requirements, see the Neag School of Education section of this Catalog.

206. Introduction to Exceptionality
Either semester. Three credits. Prerequisite: PSYC 132, Roberts
This course considers the nature of exceptionalities as well as current policy and programs in the schools and community.

207. Exceptionality I
Second semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Karan
Characteristics of students with exceptionalities.

208. Exceptionality II
First semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program.
Educational programming for learners with special needs.

210. Collaborative Program Planning in Special Education
First semester. Three credits. Prerequisite: Open only to Special Education and Elementary Education majors. Karan, Norlander-Case
Covers basic knowledge and skills related to collaboration with families, paraprofessionals, other teachers, and professionals from other disciplines, including specialized services for children with disabilities (EQ Health, Assistive Technology, Related Services). Introduction to library and computer resources for school leaders.

212. Diagnosis, Assessment, and Program Planning
First semester. Three credits. Prerequisite: Open only to Special Education and Elementary Education majors. Madaus, McGuire, Norlander-Case
Diagnosis of students with special needs, use of test data in planning instruction and report writing.

213. Positive Behavior Supports and Interventions for Students with Disabilities
Second semester. Three credits. Prerequisite: Open only to Special Education majors. Martinez
Overview of preferred practices for providing positive behavior supports for students with disabilities across a variety of classroom and other educational environments.

221. Educational Psychology
Either semester. Three credits. Prerequisite: PSYC 132, Brown, Kulinowski, Young
The psychology of learning and teaching, and the
study of the nature and development of children and adolescents.

226. Field Study in Education
Semester by arrangement. Credits and hours by arrangement. Open only with consent of instructor. Active study through visitation and participation in educational and/or rehabilitation environments. Participation in appropriate lectures and seminars is required. Students must be prepared to provide own transportation.

230. Peer Counseling
Either semester. Three credits. Prerequisite: Consent of instructor. This course will focus on the development of those communication skills which are necessary for effective peer and paraprofessional counseling. Several theories of interpersonal communication, experiential learning and self-psychology will also be covered.

240. Technology in Education
Both semesters. One credit. Open to first year students in the teacher preparation program. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Puntambekar, Young
The use of educational technology in the education profession. Emphasis is placed on computer technology, software evaluation and instructional devices.

250. Learning I
First semester. One credit. Prerequisite: PSYC 132 and open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Brown, Reis, Young
Theory and practices of learning.

251. Learning II
First semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Brown, Reis, Young
Theory and practices of learning.

252. Assessment of Learning I
First semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Archambault, Kalikovich, O’Connell
Theory and practices of the assessment of learning.

253. Assessment of Learning II
First semester. One credit. Prerequisite: Open only to students in the Integrated Bachelor’s/Master’s Teacher Preparation Program. Archambault, Kalikovich, O’Connell
Theory and practices of the assessment of learning.

262. Directed Observation and Participation
Credits by arrangement, not to exceed three. Open only with consent of instructor. Prior to registration, students must apply for Directed Observation. This course may be taken more than one semester. McGuire
This course gives prospective professionals the opportunities to observe Special Education Teachers and/or Rehabilitation Specialists working with the handicapped. Students must be prepared to provide own transportation.

277. Directed Student Teaching: Special Education
Either semester. Credits and hours by arrangement. Prerequisite: Open only to Elementary Education and Special Education majors. Application must be made to the Coordinator of Student Teaching for the fall semester prior to March 1; for the spring semester prior to October 1. Abdulaziz, Norlander
Practicum experience with mentally retarded, learning disabled and/or emotionally disturbed students.

298. Variable Topics
Either semester. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit.

299. Independent Study for Undergraduates
Either semester. Credits and hours by arrangement. Prerequisite: Open only to juniors and seniors with appropriate background for the study of education. Students must present the instructor with a problem well laid out for investigation. May be repeated for credit with a change in content.

Designed primarily for qualified students who wish to extend their knowledge in some specialized area.

Electrical and Computer Engineering (ECE)

Head of Department: Professor Robert Magnusson
Department Office: Room 312, A.B. Bronwell
Building (Engineering III)

For major requirements, see the School of Engineering section of this Catalog.

201. Fundamentals of Circuit Analysis
(Formerly offered as EE 201.) Either semester. Three credits. Three class periods and one discussion period. Prerequisite or corequisite: MATH 211 and PHYS 152. Open to sophomores or higher. This course and ECE 220 may not both be taken.

Analysis of electrical networks incorporating passive and active elements. Basic laws and techniques of analysis. Transient and forced response of linear circuits. Periodic excitation and frequency response. Computer analysis tools. Design projects are implemented and tested in the laboratory. Laboratory reports with revisions are required for each project.

211. Digital Integrated Circuit Design and Analysis
Either semester. Four credits. Prerequisite: ECE 201 and ECE 209W; or ECE 210. Three 1-hour lectures and one 2-hour laboratory. This course and either ECE 204 or 261 may not both be taken for credit.

Physical electronics underlying the operation of electronic devices. Diodes, diode models, and diode circuits. Transistors, transistor models, and transistor circuits. DC, small signal, and frequency analysis of transistor amplifiers. Compound transistor configurations. Computer analysis tools. Design projects are implemented and tested in the laboratory. Laboratory reports with revisions are required for each project.

212. Electronic Circuit Design and Analysis
Either semester. Four credits. Prerequisite: ECE 201 and ECE 209W; or ECE 210. Three 1-hour lectures and one 2-hour laboratory. This course and either ECE 204 or 261 may not both be taken for credit.

Physical electronics underlying the operation of electronic devices. Diodes, diode models, and diode circuits. Transistors, transistor models, and transistor circuits. DC, small signal, and frequency analysis of transistor amplifiers. Compound transistor configurations. Computer analysis tools. Design projects are implemented and tested in the laboratory. Laboratory reports with revisions are required for each project.

213. Digital Integrated Circuit Design and Analysis
Either semester. Four credits. Prerequisite: ECE 204 and ECE 261; or ECE 212. Three 1-hour lectures and one 2-hour laboratory. This course and ECE 215 may not both be taken for credit.


214. Power Electronics
Either semester. Two credits. Prerequisite: ECE 204 and ECE 261; or ECE 212. One 1-hour lecture and one 2-hour laboratory. This course and ECE 262W may not both be taken for credit.

Transformers and electrical motors. Switching electronic devices and power supplies. Motor control circuits. Computer analysis tools. Design projects are implemented and tested in the laboratory. Laboratory reports with revisions are required for each project.

215. Digital Integrated Circuits
(Formerly offered as EE 215.) Semester by arrangement. Three credits. Prerequisite: ECE 204 and ECE 209W. This course and ECE 213 may not both be taken for credit.

Switching, timing, wave shaping, and logic circuits to generate waveforms and functions used in pulse systems, instrumentation and computers. Emphasis is on integrated circuits.

220. Electrical and Computer Engineering Principles
(Formerly offered as EE 220.) First semester. Three credits. Prerequisite: MATH 211Q and PHYS 152, both of which may be taken concurrently. This course and ECE 201 or ECE 210W may not both be taken.

Basic concepts of circuit analysis as applied to electronic circuits and electromechanical devices, including measuring instruments.

228. Fiber Optics
(Formerly offered as EE 228.) First semester. Three credits. Prerequisite: ECE 205 or ECE 207 or PHYS 255. Application of Maxwell’s equations and geometric optics, first to two-dimensional dielectric waveguides and then to cylindrical fibers. Ray and mode theory, eigenvalues, Goos-Haenchel shift. Step-index,
229. Fiber Optics Laboratory  
(Formerly offered as EE 229.) Second semester. Three credits. One four-hour laboratory period. Prerequisite: ECE 228. 
- Hands-on design and measurement of fiber-optic applications. Fiber-optic communications and fiber-optic sensors. Structured experiments and design projects centered around available equipment.

230. Electrical Instrumentation  
(Formerly offered as EE 230.) First semester. Three credits. Prerequisite: ECE 202, ECE 204 and CSE 207. 

232. Systems Analysis  
(Formerly offered as EE 232.) Either semester. Three credits. Prerequisite: ECE 202. 

234. Digital Control Systems  
(Formerly offered as EE 234.) Second semester. Three credits. Prerequisite: ECE 232. 

240. Electronic Circuits and Applications  
(Formerly offered as EE 240.) Second semester. Three credits. Prerequisite: ECE 204 and 232. 
- Analysis and design of linear amplifiers. The effects of feedback in tuned, video, and operational amplifiers. Noise, stability, and frequency compensation. Applications encompass active filters, oscillators, phase lock loops and nonlinear operations such as multiplication, modulation, sampling, and analog-to-digital conversion.

241. Communication Systems  
(Formerly offered as EE 241.) First semester. Three credits. Prerequisite: ECE 202, and STAT 224Q. 

242. Digital Communications and Networks  
(Formerly offered as EE 242.) Second semester. Three credits. Prerequisite: ECE 202 and STAT 224Q. 

245. Micro/Opto-electronic Devices  
(Formerly offered as EE 245.) Second semester. Three credits. Prerequisite: ECE 204. 
- Principles and applications of contemporary solid state devices such as light-emitting diodes, injection lasers, solar cells, p-n-p-n diodes, SCR and Triacs, IMPATT diodes, Schottky devices, bipolar and MOS transistors, MESFETs and MODFETs, and fundamentals of integrated circuits.

246. Introduction to Dielectric and Magnetic Materials  
(Formerly offered as EE 246.) Semester by arrangement. Three credits. Prerequisite: ECE 205 or ECE 206. 

247. Introduction to Digital Signal Processing  
(Formerly offered as EE 247.) Second semester. Three credits. Prerequisite: ECE 202. 

249. Very Large Scale Integrated Circuit (VLSI) Design and Simulation  
(Formerly offered as EE 249.) First semester. Four credits. Two-hour lecture and three-hour laboratory period. Prerequisite: ECE 215. Not open to students who have passed EE 248 or EE 269.

- Design of MOS transistors, including short channel effects in sub-micron devices; scaling laws; design rules. Layout of NMOS and CMOS logic gates; power-delay calculations. Design of static and/or dynamic memories. Laboratory emphasizes schematic capture, simulation, timing analysis and testing; layout of custom IC’s; use of VHDL.

252. Digital Systems Design  
(Also offered as CSE 252.) (Formerly offered as EE 252.) Either semester. Three credits. Prerequisite: CSE 207. 
- Design and evaluation of control and data structures for digital systems. Hardware design languages are used to describe and design alternative register transfer level architectures and control units with a micro-programming emphasis. Consideration of computer architecture, memories, digital interfacing timing and synchronization, and microprocessor systems.

257. Numerical Methods in Scientific Computation  
(Also offered as CSE 257.) (Formerly offered as EE 257.) Either semester. Three credits. Prerequisite: CSE 123C and MATH 210Q and MATH 211Q. 
- Introduction to the numerical algorithms fundamental to scientific computation. Equation solving, function approximation, integration, difference and differential equations, special computer techniques. Emphasis is placed on efficient use of computers to optimize speed and accuracy in numerical computations. Extensive digital computer usage for algorithm verification.

261. Analog Electronics Design Laboratory  
(Formerly offered as EE 261.) Either semester. Three credits. 
- One class period and one 4-hour laboratory period. Prerequisite: ECE 209W or 210W, 202, and 204; ECE 202 and 204 may be taken concurrently. This course and ECE 212 may not both be taken for credit.

- Introductory design laboratory. Use of personal computers to design and measure performance of analog electronic circuits and systems. Design with both integrated circuits and discrete components.

262W. Switching and Digital Electronics Design Laboratory  
(Formerly offered as EE 262W.) Either semester. Three credits. One class period and one 4-hour laboratory period. Prerequisite: ECE 261 or ECE 212; ENGL 105 or 110 or 215. This course and ECE 214 may not both be taken for credit.


263. Communications Systems Design Laboratory  
(Formerly offered as EE 263.) Either semester. Three credits. One 4-hour laboratory. Prerequisites: ECE 205 or ECE 207, and 262W.

- Design and experimental evaluation of circuits and systems useful in communication, control, and other applications. Typical subject areas are: transmission lines, microwave antennas, AM/FM transmitters and receivers, TV cameras and receivers, communication between computers, laser communication, fiber-optics, pulse-code modulation, acoustics, hearing, rotating machines, servomechanisms, and microprocessors.

265. Independent Design Laboratory  
(Formerly offered as EE 265.) Either or both semesters. Three credits. Prerequisite: ECE 262 and consent of instructor. May be taken twice for credit.

- Experimental design project undertaken by the student by special arrangement with a faculty member of the Department of Electrical and Computer Engineering.

266. Microprocessor Applications Laboratory  
(Formerly offered as EE 266.) First semester. Three credits. One class period and one 4-hour laboratory.

- Design of software and interface hardware to use a microcomputer as an on-line, real-time element in data acquisition, filtering and control systems. Use of clocks, DAC’s, ADC’s, speech synthesis modules, and movement generators. Design project. Written and oral presentations of laboratory results.

267. Systems Laboratory  
(Formerly offered as EE 267.) Second semester. Three credits. One 4-hour laboratory period. Prerequisite: ECE 232 and ECE 262.

- Real-time digital control and signal processing systems. Typical topics include liquid level control, velocity and position control, digital filters, image processing, and power control electronics. Written and oral presentations of laboratory results.

268. Micro/Opto-electronic Devices and Circuits Fabrication Laboratory  
(Formerly offered as EE 268.) Second semester. Three credits. One class period, and one 4-hour laboratory period. Prerequisite: ECE 245, ECE 215.

- Semiconductor wafer preparation and characterization including: determination of carrier concentration, mobility, and lifetime; oxidation, diffusion, metalization, mask layouts, and photolithographic techniques as employed in the realization of discrete devices (e.g., bipolar and MOS transistors, solar cells) and integrated circuits; design of basic IC components such as transistors, resistors, and capacitors; monolithic fabrication of simple digital/ analog circuits. Design project. Written and oral presentations of laboratory results.

271. Physiological Control Systems  
(Formerly offered as EE 271.) Semester by arrangement. Three credits. Prerequisite: ECE 232.

- Analysis of human physiological control systems.
and regulators through the use of mathematical models. Identification and linearization of system components. System interactions, stability, noise, and the relationship of system malfunction to disease. The analysis and design of feedback systems to control physiological states through the automatic administration of drugs.

272. Introduction to Biomedical Engineering (Also offered as BME 210.) (Formerly offered as EE 272.) First semester. Three credits. Prerequisite: BIOL 107. Corequisite: PHYS 151Q and MATH 210Q. Open to sophomores or higher.


280. Digital Design Laboratory (Also offered as CSE 280.) (Formerly offered as EE 280.) Second semester. Three credits. Prerequisites: Prerequisite: ECE/EE 252.

Digital designing with PLA and FPGA, A/D and D/A conversion, floating point processing, ALU design, synchronous and asynchronous controllers, control path; bus master; bus slave; memory interface; I/O interface; logic circuits analysis, testing, and trouble shooting; PBC, design and manufacturing.

281. Digital Hardware Laboratory (Also offered as CSE 261.) (Formerly offered as EE 281.) Second semester. Three credits. Prerequisites: Four hours of laboratory. Prerequisite: ECE/EE 252

Advanced combinational and sequential circuit design and implementation using random logic and microprocessor based system. Hardware and software interface to the basic system. Serial communication, user program loading and execution. Microcontrollers - familiarization and inclusion in design.

290. Electrical and Computer Engineering Design I (Also offered as CSE 290.) (Formerly offered as EE 290 and EE 297.) Either semester. Two credits. Prerequisite: Senior standing.

Discussion of the design process; project statement, specifications, project planning, scheduling and division of responsibility, ethics in engineering design, safety, environmental considerations, economic constraints, liability, manufacturing, and marketing. Projects are carried out using a team-based approach. Selection and analysis of a design project to be undertaken in CSE/ECE 291 is carried out. Written progress reports, a proposal, an interim project report, a final report, and oral presentations are required.

291. Electrical and Computer Engineering Design II (Also offered as CSE 291.) (Formerly offered as EE 290 and EE 297.) Either semester. Three credits. Prerequisite: ECT 290. Hours to be arranged.

Design of a device, circuit, system, process, or algorithm. Team solution to an engineering design problem as formulated in CSE/ECE 290, from first concepts through evaluation and documentation. Written progress reports, a final report, and oral presentations are required.


Laboratory experiment in signal processing, real-time digital filters, image processing, imaging systems, data acquisition using detectors, pattern recognition, communication receivers, and system performance evaluation. Emphasis is on real-time information processing systems with interface between sensors and computer/processors. Applications of analog and digital techniques to design, implementation and testing of real-time information processing systems.

295. Special Topics in Electrical and Computer Engineering (Formerly offered as EE 295.) Semester by arrangement. Credits by arrangement. Prerequisite: Consent of instructor. With a change in content, this course may be repeated for credit.

Classroom and/or laboratory course in special topics as announced in advance for each semester.

299. Independent Study in Electrical and Computer Engineering (Formerly offered as EE 299.) Semester by arrangement. Credits by arrangement, not to exceed four in any semester. Prerequisite: Consent of instructor. With a change in content, this course may be repeated for credit.

Individual exploration of special topics as arranged by the student with course instructor.

Engineering (ENGR)

Dean: Amir Faghi
Assistant Dean for Undergraduate Education: M.E. Wood
Office: Room 304, EII Castleman Building
Director of Undergraduate Advising: David Jordan
Office: Room 326, EII Castleman Building

100. Orientation to Engineering First semester. One credit. Fifteen class periods of lecture, and eight seminar and discussion periods. Not open to Junior or Senior students in the School of Engineering. Open for credit for students who have passed ENGR 150. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

A series of orientation lectures on the many fields of engineering, followed by a series of seminars and discussions in engineering discipline-specific sections on engineering topics.

150C. Introduction to Engineering I Either semester. Three credits. Two lecture periods and one 2-hour discussion period. Not open to Junior or Senior students in the School of Engineering. Open for credit for students who have passed ENGR 100 or 166.

Introduction to engineering and the engineering profession. Topics include: problem solving, design projects, group work, oral and written reports, Fortran computer programming, and engineering graphics.

151. Introduction to Engineering II Either semester. Three credits. Two lecture periods and one 2-hour discussion period. Prerequisite: ENGR 150C or ENGR 110C, and MATH 110Q or 113Q or 115Q, which may be taken concurrently. Not open to Junior or Senior students in the School of Engineering. Open for credit for students who have passed ENGR 100 or 166.

Introduction to engineering and the engineering profession through application of physical conservation principles in analysis and design. Topics include: problem solving, conservation laws, materials properties, design selection, engineering economics, group design projects, and oral and written reports.

166. Foundations of Engineering Second semester. Three credits. Two class periods of lecture, and one two period laboratory per week. Not open for credit to Junior or Senior students in the School of Engineering. Open for credit for students who have passed ENGR 150 or 151.

Introductory topics in a specific engineering major.

Topics selected by Department or Program, or Regional Campus faculty. Students to select section based on their selected or intended major. In the context of this discipline, students would develop skills transferable to other engineering disciplines.

200. History of Materials and Technology First semester. Three credits. Open to sophomores or higher. May not be used as a professional requirement in the School of Engineering. Kattamis

Evolution of man’s knowledge of materials and technology from prehistoric cultures until the Industrial Revolution. Interaction between materials, art, science and technology. Goals, status and methods of the materials technologist in Sumerian, Babylonian, Egyptian, Greek, Roman, Extreme Oriental, Islamic civilizations and through the Middle Ages and the Renaissance in modern civilizations set in the political, social, and economic frames of the times.

201. History of Engineering Second semester. Three credits. Open to sophomores or higher. May not be used as a professional requirement in the School of Engineering. Kattamis

History of civil, electrical, mining, metallurgical, chemical, mechanical and textile engineering from the Industrial Revolution to the dawn of the twentieth century. Interaction between technology, and industrial, economic, political and cultural forces.

289. EUROTECH Internship Abroad Semester by arrangement. No credit. Prerequisite: consent of instructor. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory). A six-month internship in Germany, Austria, or Switzerland for the EUROTECH Program. The student must arrange with the instructor for this internship at least one year before the intended departure date and participate in the orientation program. To successfully complete this course the student must submit periodic reports in German on the assigned work during the work period and a final report upon return.

295. Special Topics in Engineering Either semester. Credits and hours by arrangement, or as announced. Prerequisite and/or consent: Announced separately for each course. With a change in content, this course may be repeated for credit.

Classroom and/or laboratory course in special topics as announced in advance for each semester.

English (ENGL)

Head of Department: Professor John Abbott
Department Office: Room 208, College of Liberal Arts and Sciences Building

103. English for Foreign Students Either semester. Three credits. Course may be repeated for credit. Graduate students may elect this course.

Instruction in English for non-native speakers of the language.

104. Basic Writing Either semester. Two credits. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Development of the reading and writing skills essential to university work. Students placed in ENGL 104 must pass the course before electing ENGL 105, 110, or 111. Not open to students who have passed ENGL 105, 109, 110, or 111.
105. English Composition
Either semester. Three credits. Not open for credit to students who have passed ENGL 110.
Instruction in composition through critical reading and frequent short essays.

109. Literature and Composition
Either semester. Three credits. Prerequisite: ENGL 105. Not open for credit to students who have passed ENGL 111 or 250.
Continued training in writing expository prose through the study of selections from prose, poetry, and drama.

110. Seminar in Academic Writing
Either semester. Four credits. Not open for credit to students who have passed ENGL 105. Students placed in ENGL 104 must pass that class before enrolling in ENGL 110.
Instruction in academic writing through interdisciplinary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style.

111. Seminar in Writing through Literature
Either semester. Four credits. Not open for credit to students who have passed ENGL 109. Students placed in ENGL 104 must pass that class before enrolling in ENGL 111.
Instruction in academic writing through literary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style.

112. Classical and Medieval Western Literature
First semester. Three credits. Prerequisite: ENGL 105 or 110 or 111.
This and ENGL 113 offer a study of European literature from ancient times to the present. ENGL 112 considers ancient and medieval literature through Dante.

112W. Classical and Medieval Western Literature
Prerequisite: ENGL 110 or 111 or both 105 and 109; the latter may be taken concurrently. Offered at regional campuses only.

113. Renaissance and Modern Western Literature
Second semester. Three credits. Prerequisite: ENGL 105 or 110 or 111.
Literature in the European tradition from the Renaissance through the modern periods.

113W. Renaissance and Modern Western Literature
Prerequisite: ENGL 110 or 111 or both 105 and 109; the latter may be taken concurrently. Offered at regional campuses only.

120. Major Works of Eastern Literature
Either semester. Three credits. Prerequisite: ENGL 105 or 110 or 111.
Important works of poetry, drama, and literary prose from the Middle East, South Asia, China, Japan, and Southeast Asia. All works are read in translation.

127. Major Works of English and American Literature
Either semester. Three credits. Prerequisite: ENGL 105 or 110 or 111.
Includes important works from the major genres and historical periods since Beowulf.

127W. Major Works of English and American Literature
Prerequisite: ENGL 110 or 111 or both 105 and 109; the latter may be taken concurrently. Offered at regional campuses only.

146. Creative Writing I
Either semester. Three credits. Prerequisite: ENGL 105 or 110 or 111.
First course in creative expression in fiction, poetry, and other forms.

193. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head or advisor may be required prior to the student's departure.
Special topics taken in a foreign study program.

200. Children's Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
The best literature available to children, including works by major writers and forms such as fable, folk tale, fairy tale, nursery rhyme, and short story.

201. Literature for High School Students
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Designed primarily for English education majors. May not be used to meet the English major requirement.
An introduction to the guidance of high school reading in literature.

204. Milton
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
The lyric, epic and dramatic poetry of Milton, with some consideration of his prose writing.

205. British Literature I
Either semester. Three credits. Open to sophomores or higher. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
British literature, medieval through 18th century. Intended to provide preparation for more advanced courses in British literature. This course is strongly recommended for English majors.

206. British Literature II
Either semester. Three credits. Open to sophomores or higher. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
British literature, 19th to 20th centuries. Intended to provide preparation for more advanced courses in British literature. This course is strongly recommended for English majors.

209W. Advanced Composition for Prospective Teachers
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher. Designed primarily for English education majors. May not be used to meet the English major requirement.
Advanced training in composition, with consideration of the problem of teaching writing.

210. Poetry
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
A study of the techniques and conventions of the chief forms and traditions of poetry in English.

211. Modern Poetry in English
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Poetry of the 20th century, from the major modernist innovators to significant contemporaries.

212. The Modern Novel
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Major twentieth-century novels.

214. American Poetry
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Continued study of American poetry from the 19th century to the present. Includes such writers as Whitman, Frost, Stevens, and Pound.

215. Understanding Short Fiction
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Continued study of short fiction from the 19th century to the present. Includes such writers as Hemingway, Flannery O'Connor, and Cheever.

216. The Short Story
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
The short story as a literary form with study of significant Continental, British, and American writers.

217. Studies in Literature and Culture
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. May be repeated for credit with a change in topic. Open to sophomores or higher.
An examination of social and culture aspects of printed literature and its relationship to other media. Contents will vary by section.

218. Literature and Culture of the Third World
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. May be repeated for credit with a change in topic. Open to sophomores or higher.
The literature of regions outside North America and Europe. Contents of the course will vary according to regional focus.

219. Drama
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
An introduction to the chief forms and traditions of dramatic literature through the study of a broad range of major works.

220. Medieval English Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Readings in the literature of the English Middle Ages — lyrics, narratives, dramas, and didactic forms.

220W. Medieval English Literature
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

221. Renaissance English Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Writers studied include More, Spenser, Shakespeare, Donne, Jonson, and Milton.

221W. Renaissance English Literature
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

222. Restoration and 18th-Century English Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Includes such writers as Dryden, Pope, Swift, Johnson, Burney, and Austen.

222W. Restoration and 18th-Century English Literature
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

223. Romantic and Victorian English Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Includes such writers as Austen, Wordsworth, Coleridge, Keats, Tennyson, Browning, the Brontes, G Eliot, and Arnold.

223W. Romantic and Victorian English Literature
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
mores or higher. Modern literature from the British Isles, including such writers as Yeats, Eliot, Joyce, Woolf, Lawrence, Lessing, and Shaw.

226W. Modern English Literature
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

227. World Literature in English
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
English language literature from Africa, India, Canada, Australia, the Caribbean, and other areas outside of the United States and the British Isles. Writers may include Soyinka, Gordimer, Walcott, Achebe, Markandaya, Atwood, White, Emecheta, Rushdie, Naipaul, Kincaid, and others.

227W. World Literature in English
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

230. Shakespeare I
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.
Romantic comedies and principal tragedies.

230W. Shakespeare I
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher. Offered at regional campuses only.

231. Shakespeare II
Second semester. Three credits. Prerequisite: ENGL 230 or instructor consent.
The early plays, problem plays, and late plays.

232. Chaucer
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
The Canterbury Tales and other selected works, and such attention to the Middle English language as is necessary to an understanding of the text.

233. Early and Modern Irish Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Irish literature in English to 1939: fiction, drama, and verse, including such early Irish myth as the Tain bo Cuailnge and such writers as Mangan, Somerville & Ross, Yeats, Gregory, Synge, Joyce, and O’Connor.

234. Contemporary Irish Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Irish literature in English since 1939: fiction, drama, and verse by such writers as Beckett, Bowen, O’Brien, Friel, Murdock, O’Faolain, McGahern, McGinley, Heaney, Muldoon, and Doyle.

236. Modern Drama
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Modern British, American, and Continental drama, with the reading and discussion of some 25 representative plays.

237. Maritime Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Classic works of the maritime literary tradition, including texts by Conrad and Melville and other texts contributing significantly to the culture, history and aesthetics of the sea.

238. Maritime Non-Fiction
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Classics of the non-fictional genre as they apply to an understanding of the culture of the sea. Social, humanistic, intellectual and scientific perspectives are examined through analysis of works by writers such as Steinbeck, McPhee, and Sebastian Junger.

239. American Nature Writing
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Study of writings, from the colonial era to the modern, reflecting diverse ways of imagining humanity’s relation to the natural environment.

240. Literature and Religion
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Study of diverse imaginative writings concerned with the human search for God, transcendence, and ultimate meaning.

242. The English Language
First semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
A descriptive study of modern American English: constituent sound (phonology), structure of words (morphology), and syntax, with some attention to lexicography and usage.

244. The History of the English Language
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Readings in Old English, Middle English, and Early Modern with a survey of the main developments in the language since Anglo-Saxon times.

246. Creative Writing II
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Open only with consent of instructor. Be may be repeated for credit with a change in topic.
For student writers of proved ability who wish training in techniques of fiction or verse. Emphasis on poetry.

247. Writing Workshop
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open only with consent of instructor. May be repeated for credit with a change in topic.
For student writers of proved ability who wish training in techniques of fiction or verse. Emphasis on prose fiction.

248W. Writing Tutorial
Either semester. Three credits. Hours by arrangement. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. This course may be taken only in conjunction with specially designated sections of English courses numbered 200 or above and may be repeated once for credit in conjunction with a different course. Intensive supervised practice in writing about literature.

249S. Advanced Expository Writing
Either semester. Three credits. Three class periods. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Writing on topics related, usually, to students’ individual interests and needs.

249W. Advanced Expository Writing
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.

Honors Course Sequence
The Honors course sequence, ENGL 250 through ENGL 258, is recommended for students in the Honors Program but is also open to other qualified students. Most courses are weekly seminars on major writers and topics relating to intellectual and cultural backgrounds of English and American literature.

250. Honors I: Approaches to Literature
First semester. Three credits. Hours by arrangement. Open only with consent of instructor. May be used to satisfy the ENGL 110 or 111 requirement. Not open for credit to students who have passed ENGL 109 or 110 or 111. May not be used to meet the English major requirements.
Study of a variety of approaches to literature and of their critical assumptions.

251W. Honors II: American Literature
Second semester. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Early writers and Romantics through Twain and James.

252W. Honors III: American Literature
First semester. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Realism, naturalism, modern American authors.

253W. Honors IV: English Literature
First semester, alternate years. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Medieval through Jacobean literature.

254W. Honors V: English Literature
First semester, alternate years. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Seventeenth and eighteenth century to Romantics.

255W. Honors VI: English Literature
Second semester, alternate years. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Nineteenth century literature.

256W. Honors VII: English Literature
Second semester, alternate years. Three credits. Hours by arrangement. Open only with consent of instructor. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.
Twentieth century literature.

258. Honors VIII: Honors Thesis
Either semester. Credits and hours by arrangement. Prerequisite: ENGL 105 or 110 or 111 or 250. Open only with consent of instructor. All Honors students writing an Honors Thesis must register for this course in their last semester after consultation with the director of their thesis and the English department advisor to Honors Students, who is the instructor of record.

264. Studies in Individual Writers
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250. Concentrated study in one or two authors writing in English. May be repeated for credit with a change in topic.

266. Studies in Criticism
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250. Studies in the history and theories of literary criticism.

267. Studies in Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250. May be repeated for credit with a change in topic.
Advanced exploration of various limited topics, such as a particular literary theme, form, or movement, to be announced from semester to semester.
268W. Seminars in Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. May be repeated for credit with a change in topic.

Intensive study of various limited topics, such as a particular literary theme, form, or movement, to be announced from semester to semester. Small classes with an emphasis on writing.

270. American Literature to 1880
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105. Open to sophomores or higher.

American literature from the beginnings: Poe, Emerson, Thoreau, Hawthorne, Melville, Whitman, Douglass, Stowe, Dickinson, Twain, and others.

270W. American Literature to 1880
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

271. American Literature Since 1880
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105. Open to sophomores or higher.

Modern and contemporary American literature: James, Wharton, Dreiser, Cather, Frost, Hemingway, Fitzgerald, Faulkner, Morrison, and others.

271W. American Literature Since 1880
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Open to sophomores or higher.

272. Native American Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105. Open to sophomores or higher.

Tilson, Makowski

Examination of the literatures of pre-contact, post-contact, and contemporary indigenous American cultures.

274. Asian American Literature
(Also offered as AASI 274.) Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105. Open to sophomores or higher. Chow

Literature, theatre, film about Asian American communities and culture in the United States from the mid-nineteenth century to the present.

276W. Black American Writers I
First semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109. Critical and historical examination of the literature of Black American writers from Phyllis Wheatley to the present.

277W. Black American Writers II
Second semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.

Extensive readings in the works of four or five contemporary black American writers.

278. Ethnic Literatures of the United States
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.

The literatures of ethnic American authors. Writers may include Natachee Scott Momaday, Maxine Hong Kingston, Zora Neale Hurston, Rolando Hinjosa, Bernard Malamud, Nicholas Mohr, John Fante, among others.

278W. Ethnic Literatures of the United States
Prerequisite: ENGL 110 or 111 or 250 or both 105 and 109.

279. Advanced Study: Drama
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in drama. May be repeated for credit with a change of topic.

280. Advanced Study: Poetry
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in poetry. May be repeated for credit with a change of topic.

281. Advanced Study: Prose
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in literary prose. May be repeated for credit with a change of topic.

282. Advanced Study: Literary Criticism and Theory
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in literary criticism and theory. May be repeated for credit with a change of topic.

283. Advanced Study: British Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in the literature of the British Isles. May be repeated for credit with a change of topic.

284. Advanced Study: American Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in the literature of the United States. May be repeated for credit with a change of topic.

285. Women in Literature Before 1900
First semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Analysis of the representation of women in a variety of works from different countries.

286. Women in Twentieth-Century Literature
First semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Analysis of the representation of women in a variety of works from different countries.

287. Advanced Study: Ethnic Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in British or American literature written by ethnic writers. May be repeated for credit with a change of topic.

288. Advanced Study: Anglophone Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in the English literature of one or more regions, such as South Asia, Africa or the Caribbean. May be repeated for credit with a change of topic.

289. Advanced Study: Literature of Australia, Canada, Ireland, and New Zealand
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in the literature of these Commonwealth countries. May be repeated for credit with a change of topic.

290. Advanced Study: Lesbian, Gay, Bisexual and Transgendered Literature
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105.

Intensive study of particular topics in the literary expression of lesbian, gay, bisexual and transgendered identity. May be repeated for credit with a change of topic.

291. Literature and Other Disciplines
Either semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105. May be repeated for credit with a change of topic.

The relationship of literature to other fields of study. Course content will vary by section.

292. Studies in Britain
Second semester. Three credits. Prerequisite: ENGL 110 or 111 or 250 or 105. Hours by arrangement. Open only with consent of instructor.

Environmental Engineering (ENVE)

Program Director: Nelly M. Abboud
Office: Room 312, F.L. Castleman Building

110. The Environmental Debate I
Second semester. One credit. May be repeated for credit (maximum of 3 credits).

Structured review of environmental issues and active debate during class time. Presentation of current environmental issues by environmental professionals and experts.
201. **Decision Analysis in Civil and Environmental Engineering**  
(Also offered as CE 201.) First semester. Three credits. Prerequisite: MATH 114 or 116. This course may not be taken for credit if the student has taken CE 251, CE 281, or ENVE 251. Anagnostou, Ivan  

210. **The Environmental Debate II**  
Second semester. One credit. May be repeated for credit (maximum of 3 credits).
Structured review of environmental issues and active debate during class time. Presentation of current environmental issues by environmental professionals and experts.

251. **Probability and Statistics in Civil Engineering**  
(Also offered as CE 251.) First semester. Three credits. Prerequisite: CHEM 113Q or 115Q/115V or ENGL 105. Open to sophomores or higher. This course and ENVE 201 or CE 201 may not both be taken for credit. Anagnostou, Aultman-Hall, Garrick, Ivan  
Application of statistical principles to the analysis of civil engineering problems. Topics include probability, random variable distributions, hypothesis testing, and linear regression analysis.

259C. **Soil Chemistry**  
(Also offered as PLSC 259C.) First semester, alternate years, even. Three credits. Two class periods and one 2-hour laboratory period. Prerequisites: CHEM 128 and 141. PLSC 250 is recommended. Schulthesis  
Basic concepts of the physical chemistry of soil constituents. Topics include soil solution, soil atmosphere, soil organic matter, soil mineralogy, mineral surface characteristics and chemical weathering process.

260. **Water Quality Engineering**  
(Also offered as CE 260.) Second semester. Three credits. Prerequisites: CE 263 and (CE 297 or CHEG 223). Abboud, Hou, Smets  
Physical, chemical, and biological principles for the treatment of aqueous phase contaminants; reactor dynamics and kinetics. Design projects.

262. **Environmental Engineering Laboratory**  
(Also offered as CE 262.) Second semester. Three credits. Two class periods and one 3-hour laboratory period. Prerequisites: CE 263; and prerequisite or corequisite (CE 297 or CHEG 223). Abboud, Holmen, Smets  
Aqueous analytical chemical techniques, absorption, coagulation/floculation, fluidization, gas stripping, bioavailability, interpretation of analytical results, bench-scale design projects, written and oral reports.

262P. **Environmental Engineering Laboratory**  
(Also offered as CE 262P.) Prerequisites: CE 263; and CE 297 or CHEG 223, which may be taken concurrently; ENGL 105 or 110 or 111 or 250. Must be taken with another P course in Environmental Engineering to equal one W course.

263. **Environmental Engineering Fundamentals**  
(Also offered as CE 263.) First semester. Three credits. Prerequisites: CHEM 128 or 130. Open to sophomores or higher. Hoag, MacKay, Smets  

265. **Hydraulic Engineering**  
(Also offered as CE 265.) Second semester. Three credits. Prerequisites: CE 297 or (CHEG 223 and CHEG 224). Anagnostou, Ogden  
Design and analysis of water and wastewater transport systems, including pipelines, pumps, pipe networks, and open channel flow. Introduction to hydraulic structures and porous media hydraulics. Computer applications.

266. **Hydraulic Engineering Laboratory**  
(Also offered as CE 266.) Second semester. Two credits. One class period. One 2-hour laboratory. Prerequisite: CE 297. Anagnostou, Ogden  

267. **Engineering Hydrology**  
(Also offered as CE 267.) First semester. Three credits. Prerequisites: CE 297 or (CHEG 223 and CHEG 224). Anagnostou, Ogden  

268. **Limnology**  
(Also offered as CE 268 and as EEB 247.) First semester. Three credits. Prerequisites: (MATH 109 or 112 or 115) and (CHEM 122, 127, or 129 or 137). Recommended preparation: BIOL 107 or an introductory biology course.  
Physical, chemical, and biotic interrelationships of freshwater habitats.

270. **Environmental Engineering Chemistry**  
First semester. Three credits. Prerequisite: (CHEM 128 or 130) and MATH 211. Mackay  
Quantitative variables governing chemical behavior in environmental systems. Thermodynamics and kinetics of acid/base, coordination, precipitation/dissolution, and redox reactions. Organic chemistry nomenclature.

279. **Environmental Modeling**  
(Also offered as CE 279.) Second semester. Three credits. Prerequisite: CE 263 and (CHEG 223 or CE 297).  
Systematic approach for analyzing contamination problems. Systems theory and modeling will be used to assess the predominant processes that control the fate and mobility of pollutants in the environment. Assessments of lake eutrophication, conventional pollutants in rivers and estuaries and toxic chemicals in groundwater.

280. **Introduction to Environmental Rate Processes**  
(Also offered as CHEG 280.) First semester. Three credits. Recommended preparation: CHEM 128.  
Application of thermodynamics, chemical kinetics and transfer operations to environmental problems; water pollution control. Open only to students not majoring in chemical engineering.

281. **Introduction to Water Pollution**  
(Also offered as CHEG 281.) Second semester. Three credits. Recommended preparation: CHEG 224.  
Water purification and water quality control; advection and mass transfer, biological mechanisms and kinetics; design of biological reactors and sludge treatment facilities; design and operation of physical purification methods; alternative processes for industrial wastewater treatment.

283. **Introduction to Biochemical Engineering**  
(Also offered as BME 221 and as CHEG 273.) Second semester. Three credits. Recommended preparation: CHEG 251. Wood  
Enzyme and fermentation technology; microbiology, biochemistry, and cellular concepts; biomass production; equipment design, operation, and specification; design of biological reactors; separation processes for bio-products.

285. **Introduction to Air Pollution**  
(Also offered as CHEG 285.) Second semester. Three credits. Recommended preparation: CHEG 211 or ME 230 or ME 238. Hellick  
Gaseous pollutants and their properties; basic analytical techniques for air pollutants; particulate pollutants and their properties; equipment design for removal of gaseous and particulate materials; economic and environmental impact of air pollutants; federal and state regulations.

290W. **Environmental Engineering Design I**  
First semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. To be taken during the senior year.

Students working individually or in groups produce solution to environmental engineering design projects from data acquisition through preliminary design, cost estimating and final specifications, oral presentation and written reports.

291W. **Environmental Engineering Design II**  
Second semester. Three credits. Prerequisite: ENVE 290W. To be taken during the senior year.

Students working individually or in groups complete the implementations of protocols and techniques covered in ENVE 290W, final cost of entire project, feasibility, oral presentation and written reports. Instructors will supply initial conditions and performance expectations.

295. **Special Topics in Environmental Engineering**  
Semester, credits, and hours by arrangement as announced. Prerequisite and/or consent: Announced separately for each course. Course may be repeated for credit. Classroom or laboratory course on specific topics as announced.

296. **Thesis**  
Either semester. Three credits. Prerequisite: Consent of instructor.

Designed to extend student knowledge in a specialized area of environmental engineering and introduction to research.

299. **Independent Study**  
Either or both semesters. Credits by arrangement, not to exceed six in any semester. Open only with consent of instructor.

Individual study of special topics in law as mutually arranged between student and instructor.

European Studies (ES)

Program Advisor for Center for European Studies: Ludmilla Burns  
Office: Room 5, Human Development Center

293. **Foreign Study**  
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Director required, normally to be granted prior to the student’s departure. With a change in content, may be repeated for credit.
295. Special Topics in European Studies
Either or both semesters. Three credits. With a change in topic, may be repeated for credit. Intensive study of specialized topics related to Europe, not ordinarily covered in the undergraduate curriculum; normally one-time offerings taught by distinguished visiting scholars and/or jointly appointed faculty.

298. Variable Topics
Either or both semesters. Credits to a maximum of three. Intensive study of specialized topics related to Europe not ordinarily covered in the curriculum. With change in topic, may be repeated for credit.

299. Independent Study
Either semester. Credits and hours by arrangement. Requires independent study Authorization Form from European Studies faculty. For thesis preparation or other intensive research project relating to Europe. May be repeated for credit. Sponsored by the Center for European Studies.

Finance (FNCE)

Head of Department: Professor Thomas J. O'Brien
Department Office: Room 464, School of Business

For major requirements, see the School of Business section of this Catalog.

Courses in the department are open to juniors and seniors only with the exception of FNCE 198. The School of Business requires students at the Storrs campus to participate in the Mobile Computing Initiative before registering for the courses listed below. See the School of Business Catalog section for details about how this program operates. Students not participating in the initiative may be able to register for the following classes: FNCE 198; 210, 230.

198. Contemporary Issues in Finance
Semester by arrangement. One credit. May be repeated for credit in different sections in combination with BADM 198 or MGMT 198 up to a maximum of three credits. Open to freshmen and sophomores, others with consent of instructor. May not be used to satisfy Junior - Senior level major requirements in the School of Business.

The world of business has changed. No longer can we refer to the cliché “business as usual.” Today’s business world is a complex, challenging and exciting place. Each section of the course will capture some aspect of this challenge and excitement. Students will be exposed to undercurrents that challenge and perplex today’s managers and executives around the world.

201. Financial Management
Either semester. Three credits. Prerequisite: ACCT 200, which may be taken concurrently; ECON 111 and 112 or 102; ENGL 110 or 111 or 250, or (105 and 109); MATH 106 or 114 or 116; and STAT 100 or 110. Not open to students who have passed or are taking BADM 230. An introductory examination of how a business plans its needs for funds, raises the necessary funds, and invests them to attain its goals.

202. Investment and Security Analysis
Either semester. Three credits. Prerequisite: FNCE 201.

A study of the nature of securities, the mechanics and costs of trading, and the way in which securities markets operate. Risk-return analysis will be applied in making decisions to buy or sell stocks, bonds, and options. Written analysis is required.

202W. Investment and Security Analysis
Prerequisite: FNCE 201.

203. Applications in Financial Management
First and/or second semester. Three credits. Prerequisite: FNCE 201. Recommended preparation: OPIM 203C.

An intermediate level course using cases i.e., problems faced by actual firms, to teach students how to apply financial management concepts and techniques to real-world situations.

203P. Applications in Financial Management
Prerequisite: FNCE 201. Recommended preparation: OPIM 203C. Must be taken with FNCE 206P to equal one W requirement.

204. Financial Risk Management
First and/or second semester. Three credits. Prerequisite: FNCE 201.

Applications of financial structuring and engineering with particular attention to uses of derivatives.

205. Global Financial Management
Either semester. Three credits. Prerequisite: FNCE 201.

Focuses on the detailed study of: (1) exchange rate determination, (2) operation of the foreign currency and global capital markets, and (3) hedging both transaction and economic exposure to exchange rate changes.

206. Financial Services
First and/or second semester. Three credits. Prerequisite: FNCE 201.

Study of the role of financial services companies in the money and capital markets, funds acquisitions, investment and credit extension.

206P. Financial Services
Prerequisite: FNCE 201. Must be taken with FNCE 203P to equal one W requirement.

210. Personal Finance
Either semester. Three credits. Recommended preparation: Completion of a college level math course is strongly recommended.

Designed to provide students with practical financial management skills that will enable them to identify their personal financial goals, and to plan and make financial decisions that will help them reach those goals. Topics include budgeting, investing, effective use of cash and credit, taxes, insurance, housing and automobile purchases, and retirement planning.

217. Economics for Global Business Decisions
First and/or second semester. Three credits. Prerequisite: FNCE 201 (may be taken concurrently).

Impact of globalization of the world economy on business and financial decisions. Trade, balance of payments, tariff policies, international economic institutions, exchange rates, capital flows.

221. Risk Management and Insurance
Either semester. Three credits.

A study of the concept of risk and its treatment by insurance. Topics include insurance coverage, types of insurance, and risk management techniques. Available risk management treatment techniques are identified and discussed. Analysis of applicable commercial property and liability insurance coverages is stressed.

222. Social Insurance
Second semester. Three credits. Prerequisite: FNCE 221.

An examination of causes, effects and proposed remedies for financial insecurity resulting from occupational injuries, unemployment, old age and premature death, and general illness. Emphasis is placed on the role of the government in dealing with these economic problems.

225. Life Insurance and Retirement Security
First semester. Three credits. Prerequisite: FNCE 221.

Focuses on the basic principles underlying life insurance, pensions, and other methods of insuring for financial security. Emphasis is given to the following general topics - the need for life insurance and annuities, individual retirement planning, employer provided group insurance and pensions, types of life insurance and annuity contracts, deferred compensation plans, the mathematics of life insurance, company operations, regulation, settlement options and life insurance programming.

228. Risk Management: Property and Liability Exposures
First semester. Three credits. Prerequisite: FNCE 221.

This course critically examines the risk management process introduced in FNCE 221. Emphasis is on identification and treatment of pure loss exposures faced by commercial and industrial entities. Available risk management treatment techniques are identified and discussed. Analysis of applicable commercial property and liability insurance coverages is stressed.

228W. Risk Management: Property and Liability Exposures
Prerequisite: FNCE 221; ENGL 105 or 110 or 111 or 250.

230. Real Estate Principles
Either semester. Three credits.

Overview of the personal, social and business aspects of real estate. Emphasis on home purchase decisions, location analysis, market characteristics and investment decision-making.

232. Real Estate Investments
First or second semester. Three credits. Prerequisite: FNCE 201 or FNCE 230 or BADM 230.

Risk-return analysis for alternate types of real estate investments. Techniques and applications of investment decision-making and value estimation. Lease analysis, cash flow, forecasting, appraisal techniques, discounted cash flow modeling, portfolio management, and equity securitization including real estate investment trusts.

232W. Real Estate Investments
Prerequisite: FNCE 201 or FNCE 230 or BADM 230.

233. Real Estate Finance
First or second semester. Three credits. Prerequisite: FNCE 201 or FNCE 230 or BADM 230.

Investment characteristics of mortgages and the structure and operation of mortgage markets -- both primary and secondary, including the role of securitization. Risk and return characteristics of various mortgage instruments, both residential and commercial, are analyzed from the perspective of both the borrower and lender. Tools for measuring and managing the risks of portfolios of mortgages and mortgage-backed securities are introduced.
236. GIS Applications and Use of the Internet in Real Estate Markets
First or second semester. Three credits.
How does a business decide where to relocate? Specialized Geographic Information Systems (GIS) are now used to make retail, office, and industrial location decisions. The Internet opens new sources of timely information. This gives decision-makers unprecedented power to manage data and analyze risks. Students gain hands-on experience with GIS and Internet through projects organized around real estate problems.

289. Field Study Internship
Summer session. One to three credits. Hours by arrangement. Prerequisite: Students enrolled in the Real Estate Intern program must have earned a “C” or better in Finance 230. For all others, completion of Finance 201 and at least one other finance course related to the internship area, with a grade of “C” or better in each course. Consent of instructor and Department Head prior to beginning the internship. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory). Designed to provide students with an opportunity for supervised field work in relevant major areas within the Department. Students will work with one or more professionals in their major academic area. Student performance will be evaluated on the basis of an appraisal by the field supervisor and a detailed written report submitted by the student.

293. Foreign Study
Either or both semesters. Credits and hours by arrangement, up to a maximum of six credits. Consent of Department Head required, prior to the student’s departure.
Special topics taken in a foreign study program.

296W. Senior Thesis in Finance
Either semester. Three credits. Hours by arrangement. Prerequisite: ENGL 105 or 110 or 111 or 250. Open only to Finance Department Honors Students with consent of instructor and Department Head.

298. Special Topics
Either semester. Credits and hours by arrangement. Prerequisite: Announced separately for each offering. With a change in content, may be repeated for credit. Classroom course in special topics in finance, insurance or real estate as announced in advance for each semester.

299. Independent Study
Either or both semesters. Credits by arrangement, not to exceed six in any semester. Open only with consent of instructor and Department Head.
Individual study of special topics in finance, insurance or real estate as mutually arranged between a student and an instructor.

Fine Arts (FINA)
References should be made to the offerings of art, dramatic arts and music. The courses listed below are of common interest to students in various disciplines.

Both semesters. Two credits. One 2-hour evening meeting per week. Molette
Guest lecturers and University faculty discuss their points of view as black creators, with particular reference to social context and creative expression, and discuss historical and cultural perspectives of African and African-American arts with emphasis on the influences and developments affecting African-American creators of today.

193. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head required, normally before the the student’s departure.
Special topics taken in a foreign study program.

210. French Art and Civilization
First semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
Studies of the arts in the cultural context of French and Francophone civilization, from the Middle Ages to the late twentieth century. Considerations of social systems, passions, sexuality, relations of power in their manifestations in architecture, painting and sculpture. Some lectures by and discussions with experts from Anthropology, Music, Political Science, History, and Art History.

211. Contemporary France
Second semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
An historical and cultural overview of France in the 20th and 21st centuries: from D-Day to the European Union, from Communism to the Green Party, from ballad crooners to rap, from love stories to action films; the changing French nation through authentic documents, literary texts, and films.

215. Practical Translation
Either semester. Three credits. Prerequisite: FREN 215 or instructor consent. Gordon, Melody
Translation of texts from the press, contemporary literature, film, and media. This level of translation requires the completion of an individual project.

217. Business French
Either semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
French and international business, from day-to-day entrepreneurial operations to the new European economy and globalization. Preparation for the Diplôme de Français des Affaires given by the Paris Chamber of Commerce and Industry. Recommended for those interested in working in international business and institutions.

218. Francophone Studies
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or 210 or 211 or instructor consent.
The literatures, societies, and cultures of French-speaking countries in North Africa, West Africa, the Caribbean, the Pacific and of Francophone communities of Europe and North America.

220. Theater Studies
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
A study of French dramatic texts and genres (tragedy, comedy, etc.). Popular theatre. The theory and practice of performance in contemporary France. The semiotics of stage production. Use of audio-visual material.

221. Forms and Topics in French Fiction
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
A study of literary forms in prose in their social and cultural contexts. Forms include: classic
222. Poetry
Either semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
Examples of poetry of different epochs ranging from the epic to the lyric to the limerick.

223. French Film and Theory
Either semester. Three credits. One class period. Recommended preparation: FREN 261 or 262 or 210 or 211 or instructor consent.

224. Issues in Cultural Studies, the Media, and the Social Sciences
Either semester. Three credits. Recommended preparation: FREN 211 or instructor consent. May be repeated twice for credit.
The economics of the media industry, mass audiences and new technologies, the marketing of culture, French nationalism and the global market, electronic democracy, the politics of food and addictions, ethics and new forms of human reproduction.

230. The Middle Ages: Myths and Legends
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
Founding myths and legends of Occidental culture, including a socio-cultural approach. Strong audio-visual component.

231. Renaissance and Reformation
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
Literary works from the sixteenth century in their cultural context: the secularization of daily life, passions, religious violence, the changing roles of women and reconceptualizations of sexuality, representations of the body, the relationship to Greco-Roman Antiquity; the relationship to the “Other,” the “New World.”

232. French Classical Culture and Society
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
Exploration of cultural and social change through literature and art. Women and Salons, theories and discourses on love and passions, the Cartesian revolution, the Libertins, classical science-fiction and utopias, classical comedy and tragedy, political absolutism, Versailles and the Sun King, classical colonialism and nationalism, the Ancients, and the Moderns.

233. The 18th Century: Travelers, Philosophers, and Libertines
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
The most important texts and figures of the Enlightenment: Montesquieu, Voltaire, Diderot, and Rousseau.

234. Romanticism, Realism, Fin de Siècle: 19th-Century Literature
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
The literary and artistic innovations that made France the center of 19th-century culture. The Fantastic, Realism, Naturalism, and Decadence.

235. French Modernity
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
A portrait of France in the 20th Century through contemporary French literature: existentialism, sexuality, war, colonialism, feminism, end of the century, related films and works of art.

250. Global Culture in French I
Either semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
Intense study of oral French. Learning of oral techniques of communication in conjunction with weekly topics of conversation associated with various francophone cultures. Rigorous and active oral practice through dialogues, interviews, roundtables, and oral reports.

251. Global Culture in French II
Either semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
A comprehensive study of the French phonetic system. Practice pronouncing French as the French do in a wide array of contexts.

257. French Phonetics
Either semester. Three credits. Recommended preparation: FREN 261 or 175 or three years of high school French or instructor consent.
French language through the ages, from the very first literary texts written in “Old French” to the modern variations corresponding to different linguistic levels.

261. From the Holy Grail to the Revolution: Introduction to Literature
Either semester. Three credits. Recommended preparation: FREN 261 or 262 or instructor consent.
Texts from the Middle Ages to the 18th Century, including the Arthurian legend, Renaissance poetry, Classical theater, and the philosophy of the Enlightenment in the cultural context in which they were produced.

262. From the Romantics to the Moderns: Introduction to Literature
Either semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
Study of poetry, theater and prose fiction that marks the evolution from the psychology of the romantic hero and heroine to Existentialist philosophy and the New Novel, and contemporary fiction and poetry.

267. Grammar and Culture
Either semester. Three credits. Recommended preparation: FREN 164 or 175 or three years of high school French or instructor consent.
The study of French and Francophone culture through fiction, non-fiction, journalism and film. Emphasis on perfecting both oral and written expression through discussion, presentations, and composition on assigned topics.
261. Issues in Contract Bargaining
Both semesters. Three credits. Not applicable to School of Business degree requirements.

262. Introduction to Mediation and Arbitration
Second semester. Three credits. Crossdale, Sullivan

263. Psychology of Workplace Safety
Both semesters. Three credits.

264. Workplace Environmental Issues
Both semesters. Three credits.

265. Workplace Environmental Law and Regulations
Both semesters. Three credits.

266. Workplace Security and Violence
Both semesters. Three credits.

The course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

218. Entrepreneurial II
Either semester. Three credits. Not applicable to School of Business degree requirements.

Interviewing, hiring, evaluation and firing of employees; legal issues related to Human Resources; fringe benefit issues; time management; providing excellent customer service; the diversity of the market place; presentation skills and presentation etiquette; using PowerPoint for presentations and proposal preparation; how to deal with success and growth; how to deal with failure; the positives and the negatives of being an entrepreneur and is it for you.

219. Advanced Entrepreneurial
Either semester. Three credits. Not applicable to School of Business degree requirements.

Integrating topics in Entrepreneurial Skills I and II with more detailed information on types of financial support and how the types differ, on pricing a product and service in the marketplace, on what e-commerce is and how to use it effectively together with more traditional marketing methods, and on the managerial and fiscal management that is required for success; quality control issues, working in teams and team building, and long range planning and strategizing will also be covered.

220. Entrepreneurial Seminar
Either semester. Three credits. Not applicable to School of Business degree requirements.

In-depth discussion of business plans and the different types of business plans and how each type relates to the type of funding sought (e.g., a bank versus a venture capitalist) together with the actual writing of a business plan. Students can work individually or on a team basis to prepare and present a business plan suitable to the type of funding source desired using a real entrepreneurial idea or doing the plan as an academic exercise. Each student or team must present the plan to a class on a trial run basis for class comment and analysis. The polished business plan must then be presented to an external panel and the panel acts as if it were a funding agent being asked to give money to implement the plan.

221. Dimension of American Civic Engagement
Either semester. Three credits.

The purpose of this course is to examine the concept of citizenship in America and to discuss and evaluate the state of citizenship through historical, philo-

222. Federal Law and Collective Bargaining
Second semester. Three credits. Hoffman, Sullivan

This course provides the student with the fundamental skills needed to understand the collective bargaining under federal law.

Either semester. Three credits. Not applicable to School of Business degree requirements.

Discussion of marketing concepts, processes, strategies and management within context of product/service organizations both in the profit and the non-profit sector whether large or small.

225. Financial Statement Analysis for Non-Financial Managers
Either semester. Three credits. Not applicable to School of Business requirements.

Concepts and principles to enable non-financial managers to intelligently read and analyze financial reports.

226. Issues in Contract Bargaining
Both semesters. Three credits. Sullivan

This course provides the student with the introductory skills needed to participate fully in bargaining.

227. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace chemical hazard and their biological effects.

228. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace safety hazards and their occurrence and controls.

229. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

230. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

231. Dimension of American Civic Engagement
Either semester. Three credits.

The purpose of this course is to examine the concept of citizenship in America and to discuss and evaluate the state of citizenship through historical, philo-

Second semester. Three credits. Hoffman, Sullivan

This course provides the student with the fundamental skills needed to understand the collective bargaining under federal law.

Either semester. Three credits. Not applicable to School of Business degree requirements.

Discussion of marketing concepts, processes, strategies and management within context of product/service organizations both in the profit and the non-profit sector whether large or small.

235. Financial Statement Analysis for Non-Financial Managers
Either semester. Three credits. Not applicable to School of Business requirements.

Concepts and principles to enable non-financial managers to intelligently read and analyze financial reports.

236. Issues in Contract Bargaining
Both semesters. Three credits. Sullivan

This course provides the student with the introductory skills needed to participate fully in bargaining.

237. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace chemical hazard and their biological effects.

238. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace safety hazards and their occurrence and controls.

239. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

240. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

241. Dimension of American Civic Engagement
Either semester. Three credits.

The purpose of this course is to examine the concept of citizenship in America and to discuss and evaluate the state of citizenship through historical, philo-

Second semester. Three credits. Hoffman, Sullivan

This course provides the student with the fundamental skills needed to understand the collective bargaining under federal law.

244. Marketing Concepts and Practices into the 21st Century
Either semester. Three credits. Not applicable to School of Business degree requirements.

Discussion of marketing concepts, processes, strategies and management within context of product/service organizations both in the profit and the non-profit sector whether large or small.

245. Financial Statement Analysis for Non-Financial Managers
Either semester. Three credits. Not applicable to School of Business requirements.

Concepts and principles to enable non-financial managers to intelligently read and analyze financial reports.

246. Issues in Contract Bargaining
Both semesters. Three credits. Sullivan

This course provides the student with the introductory skills needed to participate fully in bargaining.

247. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace chemical hazard and their biological effects.

248. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace safety hazards and their occurrence and controls.

249. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

250. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

251. Dimension of American Civic Engagement
Either semester. Three credits.

The purpose of this course is to examine the concept of citizenship in America and to discuss and evaluate the state of citizenship through historical, philo-

252. Federal Law and Collective Bargaining
Second semester. Three credits. Hoffman, Sullivan

This course provides the student with the fundamental skills needed to understand the collective bargaining under federal law.

Either semester. Three credits. Not applicable to School of Business degree requirements.

Discussion of marketing concepts, processes, strategies and management within context of product/service organizations both in the profit and the non-profit sector whether large or small.

255. Financial Statement Analysis for Non-Financial Managers
Either semester. Three credits. Not applicable to School of Business requirements.

Concepts and principles to enable non-financial managers to intelligently read and analyze financial reports.

256. Issues in Contract Bargaining
Both semesters. Three credits. Sullivan

This course provides the student with the introductory skills needed to participate fully in bargaining.

257. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace chemical hazard and their biological effects.

258. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace safety hazards and their occurrence and controls.

259. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

260. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace environment, the competition; promotion and advertising; patents, copyrights, and trademarks; cash flow management; pricing of products and services; record keeping and accounting; organization forms such as incorporation, partnership, dba; taxes and tax implications of decisions and actions; government regulations; leases and licenses; and how to get your accountant and lawyer involved.

261. Dimension of American Civic Engagement
Either semester. Three credits.

The purpose of this course is to examine the concept of citizenship in America and to discuss and evaluate the state of citizenship through historical, philo-

262. Federal Law and Collective Bargaining
Second semester. Three credits. Hoffman, Sullivan

This course provides the student with the fundamental skills needed to understand the collective bargaining under federal law.

Either semester. Three credits. Not applicable to School of Business degree requirements.

Discussion of marketing concepts, processes, strategies and management within context of product/service organizations both in the profit and the non-profit sector whether large or small.

265. Financial Statement Analysis for Non-Financial Managers
Either semester. Three credits. Not applicable to School of Business requirements.

Concepts and principles to enable non-financial managers to intelligently read and analyze financial reports.

266. Issues in Contract Bargaining
Both semesters. Three credits. Sullivan

This course provides the student with the introductory skills needed to participate fully in bargaining.

267. Workplace Chemical Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace chemical hazard and their biological effects.

268. Workplace Safety Hazards
Both semesters. Three credits.

This course provides a comprehensive overview of the workplace safety hazards and their occurrence and controls.
293. Foreign Study
Either semester. Credits and hours by arrangement. Joshee, Rodin
Utilizing experiential learning approaches, this course will provide students the hands-on opportunity to learn about a particular country, culture, religion, society and people. Students in this course will physically travel to the country to be studied and participate in a series of lectures and seminars together with site visits and field trips of historic places, educational institutions, museums and libraries.

296. BGS Internship
Either semester. Credits and hours by arrangement. Open only with consent of instructor and BGS mentor/advisor. With a change in content, may be repeated for credit.

297. BGS Summary Project
Either semester. Three credits. Open only with consent of BGS mentor/advisor.
A project demonstrating the student’s educational accomplishments and ability to synthesize the disciplines studied into a coherent whole.

298. Variable Topics
Either semester. Credits and hours by arrangement. With a change in content, may be repeated for credit.

299. Independent Study
Either semester. Credits and hours by arrangement. Open only with consent of instructor and BGS mentor/advisor. With a change in content, may be repeated for credit.

Geography (GEOG)

Head of Department: Professor William Berentsen
Department Office: Room 422, College of Liberal Arts and Sciences Building
For major requirements, see the College of Liberal Arts and Sciences section of this Catalog.

104. Introduction to Geography
(Formerly offered as GEOG 150.) Either semester. Three credits. Two class periods and one 1-hour discussion/laboratory period.
Principles, concepts and methods of modern geography are developed both in general form and specific case studies. Examples pertaining to both the human and physical environment will be discussed.

105. Climate, Weather, and the Environment
Either semester. Three credits.
Interactions between weather and climate and the human and natural environment. Emphasis on understanding the linkages between natural processes and societal/environmental issues.

130. The City in the Western Tradition
(Also offered as URB 130.) Either semester. Three credits.
A broad discussion of the role and structure of the city in the western tradition from the Classical period to contemporary America. Special emphasis will be placed on the mechanisms by which cities and ideas about them have been diffused from one place to another and on the changing forces that have shaped the western city.

160. World Regional Geography
Either semester. Three credits.
Study of geographic relationships among natural and cultural environments that help to distinguish one part of the world from another. Analysis of selected countries as well as larger regions, with specific reference to the non-western world.

193. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head or advisor may be required prior to the student’s departure.
Special topics taken in a foreign study program.

200. Economic Geography
Either semester. Three credits. Open to sophomores or higher.
Examination of the relationship among economic, cultural, and geographic processes which affect the patterns, structure, and growth or decline of economic activities. The global extent of the agricultural, manufacturing, and service sectors is presented with particular emphasis on the interdependency of non-western and western economies.

204. Global Issues in Human Geography
First semester. Three credits.
Geographic perspectives on global issues focusing on the relationships between human behavior/activities, and the physical, economic, and cultural environments.

205. Introduction to Physical Geography
Either semester. Three credits. Open to sophomores or higher.
The physical elements and processes of the lithosphere, hydrosphere and atmosphere are considered in relation to one another and to the distribution of the world’s environments. Emphasis on the basic concepts and theories of physical geography.

210. Social Uses of Space
(Formerly offered as GEOG 211.) Second semester. Three credits.
Identification of social space (regions) at varying scales from neighborhood to national, and movement within and among these social spaces. Attention also to geographical aspects of social identity, including territoriality and community, and problems of locating social facilities.

210W. Social Uses of Space
Prerequisite: ENGL 105 or 110 or 111 or 250.

215. Climate and Weather
First semester. Three credits.
Analysis of atmospheric processes giving rise to weather systems and climatic patterns. The dynamic integration of atmospheric systems is emphasized.

230. Fluvial Geomorphology
First semester, alternate years. Three credits. One required weekend field trip. Prerequisite: GEOG 205 or GEOL 102 or BIOL 105 or instructor consent.
Physical forms and processes associated with rivers. Factors controlling open-channel flow, sediment transport, channel morphology, adjustments of rivers to environmental change, and human impacts. River management and restoration strategies.

231. Location Analysis
The study of issues and approaches in location analysis. Topics include location, theory and models, impacts of locational choice, systems analysis, evaluation of service areas, land use allocation, accessibility and locational conflict. Implications for planning and public policy are stressed.

232. Principles and Applications of Physical Geography
First semester. Four credits. Recommended preparation: GEOG 205 or 215. Not open for credit to students who have passed GEOG 214 or 232W.
Laboratory and field study of the physical environment. Techniques, methodologies, and basic concepts of physical geography.

233. Urban Geography
(Also offered as URB 233.) First semester. Three credits. Open for credit to students who have passed GEOG 212 or URB 212.
Analysis of the growth, distribution, and functional patterns within and among Western cities. Application of urban geographical concepts to city planning problems.

234. The Geography of Economic Development
Second semester. Three credits. Prerequisite: GEOG 200.
Analysis of processes and patterns of economic organization and spatial change at the international, national and intra-national scales. Examines development from both linear (neo-classical) and structuralist (political economy) perspectives, and emphasizes relationships between advanced and developing economies within the context of the global economy.

236. Human Modifications of Natural Environments
Either semester. Three credits. Not open for credit to students who have passed GEOG 236.
A geographical and historical interpretation of the changing relationships between culture and environment. Emphasis on the modification of the biophysical environment by preagricultural, agricultural and urban societies in Europe, southwest Asia, and North America.

237. Environmental Planning and Management
The basic elements of the conflict between human environments and natural systems are considered along with the methods of analysis and resolution of problems caused by that conflict. Emphasis on public policy related to environmental issues.

238. Applied Population Geography
Either semester. Three credits. Recommended preparation: GEOG 104 (Formerly GEOG 150) or 200.
The study of the composition and growth of small-area populations with respect to public and private sector decision making in more developed societies. Basic concepts and techniques for analyzing local populations are presented in the context of significant population issues in the United States.

239. Geography of Asian American Experience
(Also offered as AASI 239.) First semester. Three credits.
Geographical perspective on issues facing Asian American communities: immigration, community formation, economic structure, race relations, and political participation. The changing dynamics of American ethnicity and study of the enthoburb. Diversity among Asian Americans, and comparison with other ethnic groups.

240C. Cartographic Techniques
Second semester. Four credits. One 2-hour lecture and two 2-hour laboratory periods. Open to sophomores or higher.
A laboratory-oriented introduction to computer-based map design and compilation. Concepts of scale, symbolization, map balance, and layout are emphasized for both general and thematic mapping.

242Q. Geographic Data Analysis
Second semester. Four credits. Three class periods and one 2-hour laboratory. Prerequisite: MATH 101 or passed Q Readiness Test or passed a Q course. Recommended preparation: 100-level STAT.
An introduction to the use of quantitative methods in conducting research, with particular emphasis on the processing and analysis of geographic data.
245V. Introduction to Computer Assisted Cartography (Q,C)
Second semester. Four credits. Three class periods and one 2-hour Laboratory. Prerequisite: MATH 101 or passed Q Readiness Test or passed a Q course. Recommended preparation: GEOG 242 or equivalent.

Introduction to numeric cartography and a review of standard computer-assisted mapping programs. Emphasis is given to data compilation for machine presentation of cartographic information. Exercises will introduce students to a variety of input and output display media.

246C. Introduction to Geographic Information Systems

The study of the fundamental principles of geographic information systems (GIS). Topics include history of the field, components of a GIS, the nature and characteristics of spatial data, methods of data capture and sources of data, database models, review of typical GIS operations and applications. Laboratory exercises provide experience with common computer-based systems.

248C. Applications of Geographic Information Systems
Second semester. Four credits. One 2-hour lecture and two 2-hour laboratory periods. Prerequisite: GEOG 246. Not open for credit to students who have passed GEOG 247.

Applications of geographic information systems. Particular attention to land use planning and resource management.

249. Selected Topics in Geographic Information Systems
Either semester. Two credits. May be repeated once for credit with change in content. Recommended preparation: GEOG 242Q.

Selected problems in geospatial decisionmaking and the most commonly used GIS functions, databases, and analyses for decision support.

252. The American Landscape
Second semester, alternate years. Three credits.

The changing attitudes toward the American environment from pre-Columbian times to the twentieth century, and the consequences of those attitudes for the development of contemporary landscapes in the United States.

252W. The American Landscape
Prerequisite: ENGL 105 or 110 or 111 or 250.

253. Geography of Russia and Eastern Europe
First semester, alternate years. Three credits.

Interactive study of geographic patterns in Russia, Eastern Europe and Central Asia including analyses of climate and resources; population, culture, and urbanization; economic development; and political organization in an historical and contemporary framework.

253W. Geography of Russia and Eastern Europe
Prerequisite: ENGL 105 or 110 or 111 or 250.

254. Contemporary Europe: A Geography
Either semester. Three credits.

An introduction to the Europe (including the European republics of the former U.S.S.R.). Emphasis on the economic, political, and social forces both maintaining national identities and shaping a united Europe.

255. Geography of Latin America
Second semester. Three credits.

An integrative study of the physical, historical, social, political and economic geography of Latin America. Particular emphasis on patterns, processes and problems of spatial economic change in the region.

255W. Geography of Latin America
Prerequisite: ENGL 105 or 110 or 111 or 250.

258. Geography of Africa
Second semester. Three credits.

Problems of economic, political, social and spatial integration in Africa. Focus on past and contemporary patterns of change (including associated conflicts) examined within the context of the broader global economy.

274. Urban and Regional Planning
Either semester. Three credits. Recommended preparation: GEOG 200 or instructor consent. Open only with consent of instructor.

Urban and regional planning, with emphasis on (1) duties of local planners, especially land use planning, and (2) the political context for planners’ work. Legal and political issues in communities and organizations.

280W. Geographical Analysis of Urban Social Issues
Second semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Recommended preparation: GEOG 210 or 233.

Analysis of socioeconomic patterns and issues within urban areas, with emphasis on applied geographical research. Policy implications are stressed.

282V. Computer Applications in Spatial Analysis (Q,C)
First semester, alternate years. Three credits. Prerequisite: MATH 101 or passed Q Readiness Test or passed a Q course. Recommended preparation: GEOG 242 or equivalent.

An advanced seminar in the design of computer programs for solving problems in spatial analysis. Students receive a thorough knowledge of Fortran and related graphic subroutine libraries necessary to implement individual projects.

284W. Advanced Economic Geography
Second semester. Three credits. Prerequisite: GEOG 200 or instructor consent; ENGL 105 or 110 or 111 or 250.

Problems involved in analyzing spatial variations of selected economic variables. Emphasis on location theory with view toward integrating geographic viewpoint and economic concepts.

285W. Advanced Physical Geography
Second semester, alternate years. Three credits. Prerequisite: GEOG 205 or instructor consent; ENGL 105 or 110 or 111 or 250.

Problems involving the application of physical processes in our changing environment.

286W. Environmental Evaluation and Assessment
First semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Recommended preparation: GEOG 205 or 236.


287W. Environmental Restoration
First semester. Three credits. Prerequisite: GEOG 205 or GEOL 102 or BIOL 108 or instructor consent; ENGL 105 or 110 or 111 or 250.

Restoration of natural environments including rivers, wetlands, coastal areas, grasslands and forests. Theoretical discussions of restoration ecology, management and engineering concerns. History of environmental restoration; relevant policy debates; specific case studies of river, wetland, coastal, grassland, and forest restoration.

288W. Regional Development and Policy
First semester. Three credits. Prerequisite: GEOG 200 or instructor consent; ENGL 105 or 110 or 111 or 250.

A study of theory and practice in regional development and planning. Emphasis on evaluation of regional problems and public policies designed to resolve them, with a primary focus on the United States.

293. Foreign Study
Either or both semesters. Credits and hours by arrangement, up to a maximum of six credits. Consent of Department Head required prior to the student’s departure.

Special topics taken in a foreign study program.

294. Internship in Geography: Seminar
Either semester.Credits, not to exceed three, by arrangement. Prerequisite: Consent of instructor. Corequisite: GEOG 295.

Description, analysis, and evaluation of the fieldwork portion (GEOG 295) of the internship. Written reports are required.

295. Internship in Geography: Field Study
Either semester. Credits, not to exceed three, by arrangement. Hours by arrangement with hosting agency, not to exceed 16 hours per week. Prerequisite: Consent of instructor. Corequisite: GEOG 294. May not be repeated for credit. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

A fieldwork internship program under the direction and supervision of the geography staff. Students will be placed in agencies or industries where their academic training will be applied. One 8-hour work day per week (or its equivalent) for the host agency during the course of the semester will be necessary for 3 academic credits.

296. Senior Thesis
Either semester. Three credits. Hours by arrangement. Prerequisite: One advanced seminar in geography and/or 3 credits of independent study in geography. Open only with consent of instructor and department head.

296W. Senior Thesis
Prerequisite: One advanced seminar in geography and/or 3 credits of independent study in geography; ENGL 105 or 110 or 111 or 250. Open only with consent of instructor and department head.

297. Variable Topics
Either semester. Three credits. With a change in topic, may be repeated for credit. Prerequisites and recommended preparation vary.

298. Special Topics
Either or both semesters. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit.

299. Independent Study
Either or both semesters. Credits, not to exceed 6, and hours by arrangement. May be repeated for credit.
101. Introductory Environmental Geology
Either semester. Three credits. Not open for credit to students who have passed GEOL 102.
Described for the non-science major. Applied geologic principles and processes. Environmental hazards, mineral resources and water problems affecting land use.

102. Introductory Geology
Either semester. Four credits. Three class periods and one 3-hour laboratory period.
Description and analysis of the physical, chemical and biological processes that continually modify the shape of the earth's surface and the earth's structure and composition of its interior. Methods of interpreting earth history from evidence now preserved in rocks. Field trips are held during several of the regular laboratory periods.

111. Age of the Dinosaurs
Either semester. Three credits. Thorson
A reconstruction of the Mesozoic world of the dinosaurs as interpreted from geological and paleontological evidence. Course includes fundamental concepts of stratigraphy, historical geology, paleoclimatology, and paleontology.

205. Current Issues in Environmental Science
(Also offered as EEB 205.) Second semester, alternate years. Three credits. Open to honors students. Open to non-honors students only with consent of instructor. Recommended preparation: 8 credits of college-level science. Simon, Thorson
Readings and discussions of current issues in environmental science, emphasizing linkages between earth, oceans, atmosphere, and biosphere. Topics include: climate change, ecosystems, alternative energy, population growth, endangered biodiversity, genetically-engineered organisms, deforestation/restoration, risk assessment, tradeoffs, problem-solving, and future possibilities.

212. Field Geology
Second semester. Six credits. Four weeks intensive study following final examination period. Prerequisite: GEOL 102. Gray, Philpotts
Field methods for geological and environmental geoscience studies, including electronic surveying techniques, aerial photograph interpretation, geological mapping, description and measurement of sedimentary sections, techniques of underground mapping, and geophysical surveying.

213. Spring Field Trip
Second semester. Variable credits. Prerequisite: GEOL 250, 251, 252, and 253, one of which may be taken concurrently.
Spring field trip during spring break, and supporting research. First 7 weeks: background readings from primary literature and secondary literature. Seven weeks following trip: supervised laboratory research using field samples. One or more short research papers and presentation to the department.

214Z. Igneous Petrology (Q,W,C)
Second semester, alternate years. Four credits. Three class periods and one 3-hour laboratory. Prerequisite: GEOL 253; MATH 101 or passed Q Readiness Test or passed a Q course; ENGL 105 or 110 or 111 or 250. Recommended preparation: MATH 114 or 116. Philpotts
Introduction to rocks and the physical and chemical principles governing their formation. Fluid mechanics of magmas, heat transfer, thermodynamics, phase equilibria, isotopes, and geochronology. The relation of magmatism to plate tectonics. Optical microscopy, x-ray fluorescence, and electron microprobe analysis. Preparing a paper suitable for publication in a scientific journal.

215V. Metamorphic Petrology
Second semester, alternate years. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: GEOL 253; MATH 101 or passed Q Readiness Test or passed a Q course. Recommended preparation: MATH 114 or 116. Joosten

217. Advanced Structural Geology
Second semester. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: GEOL 250, Crespi
Mechanics of rock deformation. Material behavior of rocks and their geometry during orogenesis, with applications of finite strain analysis, and advanced geometric techniques. One or more weekend field trips may be required.

219. Invertebrate Paleontology
First semester, alternating years. Four credits. Two class periods and two 2-hour laboratory periods. Prerequisite: GEOL 250, Crespi
The systematics, anatomy, evolutionary patterns and ecology of the major groups of invertebrate fossils.

220. Principles of Geomorphology
First semester. Three credits. Two 1-hour class periods and one 3-hour laboratory (occasionally used for field trips). Prerequisite: GEOL 251, Thorson
Interpretation of landscape genesis with an emphasis on causal processes and paleoenvironmental implications.

223. Glacial Processes and Materials
Second semester. Three credits. One 2-hour class period and one 3-hour laboratory (for lab exercises and field trips). Recommended preparation: GEOL 251, Thorson
Reconstruction of former glaciers and the interactive processes leading to the character and distribution of unconsolidated surface materials in glaciated regions. Techniques for interpreting subsurface unconsolidated materials.

227. Polarized Light Microscopy
First semester. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: GEOL 253, Gray

229. Engineering and Environmental Geology
Second semester. Three credits. Recommended preparation: GEOL 101 or 102, Liu
Application of geological principles to engineering and environmental problems. Topics include site investigation, geologic hazards, slope processes, earthquakes, subsidence, and the engineering properties of geologic materials. Course intended for both geology and engineering majors.

234C. Introduction to Ground-Water Hydrology
First semester. Four credits. Three class periods and one 2-hour laboratory for which occasional field trips will be substituted. Prerequisite: MATH 114 or 116 and GEOL 102, or instructor consent. Robbins
Basic hydrologic principles with emphasis on hydrologic and geologic relationships, use of quantitative techniques.

235. Chemical Hydrogeology
Second semester. Three hours lecture and three hours laboratory. Prerequisite: GEOL 234 and CHEM 127-128. Gray, Robbins
Chemical processes controlling the composition of unconsolidated and consolidated materials. Field and laboratory analytical techniques. Equilibrium, reaction and transport models of the chemical interactions groundwater and the media through which it travels. Applications of geochemical processes and principles understanding to the mitigation of environmental problems.

240. Sedimentation and Stratigraphy
First semester. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: GEOL 241. Crespi
Composition, deposition and diagenesis of marine and non-marine sediments; stratigraphic methods; dynamics of sediment incorporation into the stratigraphic record. An examination of recent sedimentary sequences as a key to understanding ancient sedimentary environments. One or more weekend field trips may be required.

250. Earth History and Global Change
First semester, alternating years. Four credits. Three class periods and one 3-hour laboratory period. Prerequisite: GEOL 102. Crespi
Required of all Geology majors.
Reconstruction of earth history from geological and palaeoclimatic data. Processes and events responsible for the stratigraphic record, and techniques used to decipher it. An integrated survey of earth history. One or more weekend field trips may be required.

251. Earth Surface Processes
Both semesters. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: GEOL 102. Crespi
Processes responsible for the formation of the unconsolidated materials, landforms, and soils which constitute the Earth's surface. Introduction to surface-water and groundwater hydrology, geological hazards and the effects of climatic change. One or more weekend field trips may be required.

252. Earth Structure
First semester. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: GEOL 102. Crespi
Required of all Geology majors.
Structure and composition of the earth, including a survey of plate tectonics and crustal evolution. Geophysical, thermal and tectonic processes associated with the earth's surface and interior. One or more weekend field trips may be required.

253. Earth Materials
First semester. Four credits. Two class periods and two 3-hour laboratory periods. Prerequisite: GEOL 102. Crespi
Recommended preparation: CHEM 127-128. Required of all Geology majors.
Principles of symmetry and crystal chemistry and the identification of minerals by hand sample, petrographic and x-ray methods. Description of the mineralogy and texture of igneous, sedimentary and metamorphic rocks and the application of contemporary petrogenetic models to the interpretation of the geologic environments they record. One or more weekend field trips may be required.
257. Field Problems in Earth Structure
First semester. One credit. Two weekend field trips and two 2-hour class meetings. Prerequisite or corequisite: GEOL 252.
Mapping techniques and map interpretation using concepts developed in GEOL 252. Emphasis on mapping moderately deformed rocks in which sedimentary and tectonic features can be differentiated.

271. Plate Tectonics and Geologic Processes
(Formerly offered as GEOL 261.) Second semester.
Three credits. Prerequisites: GEOL 250 and 252, which may be taken concurrently. Not open for credit to students who have passed GEOL 261.
Understanding the structure and composition of the Earth's lithospheric plates using geological and geophysical techniques and analyses of magnetic anomalies, ocean floor sediments and the geologic history of the continents. Emphasis on the interaction of geologic and plate processes, especially along plate boundaries.

293. Internship in Geology and Geophysics - Field Study
Either semester. One to three credits. May not be repeated. Internship contract must be formulated before internship work begins. Students with summer internship must preregister for GEOL 293 for the fall semester. Prerequisite or corequisite: GEOL 250, 251, 252, and 253. Must be taken concurrently with GEOL 294; no credit will be given for one course without the other. Credits earned in GEOL 293 cannot be included in the 24 or 36 credits of 200-level Geology and Geophysics courses needed to meet the requirements of the B.A. or B.S. degree, respectively. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

An internship program under the direction of Geology and Geophysics faculty. Students will be placed with government agencies or businesses where academic training will be applied in a program of activities to be planned and agreed upon in advance by the job site supervisor, the faculty coordinator, and the intern. One credit may be earned for each 42 hours of pre-approved activities up to a maximum of three credits.

294. Internship in Geology and Geophysics - Research Paper
Either semester. One credit. May not be repeated. Internship contract must be preregister for GEOL 294 for the fall semester. Prerequisite or corequisite: GEOL 250, 251, 252, and 253. Must be taken concurrently with GEOL 294; no credit will be given for one course without the other.
Preparation of written report and oral presentation to Department summarizing internship experience and evaluating the applicability of academic experience to job situations and the impact of the internship experience on academic and career plans.

295. Variable Topics
Either semester. Three credits. With a change in topic, may be repeated for credit. Prerequisites and recommended preparation vary.

296. Undergraduate Research in Geology and Geophysics
Either semester. Three credits. Hours by arrangement. Open only with consent of instructor.
Independent research for the advanced undergraduate student interested in investigating a special problem involving field and/or laboratory observations in geology and geophysics. The student is required to give an oral presentation in a departmental seminar at the end of the semester.

297W. Undergraduate Research Thesis in Geology and Geophysics
Either semester. Three credits. Hours by arrangement. Prerequisite: GEOL 296; ENGL 105 or 110 or 111 or 250. Open only with consent of instructor.
Writing of a formal thesis based on independent research conducted by the student.

298. Special Topics
Either semester. Credits and hours by arrangement. May be repeated for credit. Open only with consent of instructor.
Investigation of special topics related to, but not ordinarily covered in the undergraduate offerings; emphasis on laboratory projects.

299. Independent Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Open only with consent of instructor.

Geophysics

274Q. Physics of the Earth's Interior
First semester. Three credits. Prerequisite: PHYS 123 or 132 or 142 or 152, which may be taken concurrently; MATH 113 or 115 or 120, which may be taken concurrently, not open to students who have taken GEOL 264Q. Cormier
The composition, structure, and dynamics of the Earth's core, mantle, and crust inferred from observations of seismology, geomagnetism, and heat flow.

276Q. Fundamentals of Planetary Science
Second semester. Three credits. Prerequisites: PHYS 123 or 132 or 142 or 152, which may be taken concurrently; MATH 114 or 116 or 121, which may be taken concurrently, not open to students who have taken GEOL 264Q. Cormier
Evolution of the solar system, celestial mechanics, tidal friction, internal composition of planets, black-body radiation, planetary atmospheres.

277Z. Exploration Seismology (Q, W, C)
First semester. Three credits. Two class periods and one 3-hour laboratory period. Prerequisite: PHYS 123 or 132 or 142 or 152, which may be taken concurrently; MATH 113 or 115 or 120, which may be taken concurrently; ENGL 105 or 110 or 111 or 250; not open to students who have taken GEOL 267Q. Liu
Principles of seismic methods for imaging the interior of the earth, with applications to resource exploration and environmental problems.

278Z. Applied and Environmental Geophysics (Q, W, C)
Second semester. Three credits. Two class periods and one 3-hour laboratory period. PHYS 123 or 132 or 142 or 152, which may be taken concurrently; MATH 114 or 116 or 121, which may be taken concurrently; ENGL 105 or 110 or 111 or 250; not open to students who have passed GEOL 268Q. Liu
Principles of imaging the Earth's interior using observations of electric, magnetic, and gravity fields, with applications to environmental problems.

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German (GERM)

Head of Department: Professor David K. Herberger
Department Office: Room 228, J.H. Arjona Building
Consult the Modern and Classical Languages Department listing in this Catalog for requirements for Majors in German.

111 through 114. Special Intensive Course
First and second semesters. Eight credits per semester. Two hours a day, four days a week, plus a 2-hour laboratory practice. Open only with consent of instructor.

Not open for credit to students who have passed GERM 131 through 134.

Intensive coverage of two years in two semesters. German 111-112 (fall) covers same materials as 131-132. Elementary German: GERM 113-114 (spring) covers same material as GERM 133-134, Intermediate German.

131-132. Elementary German I and II
Both semesters. Four credits each semester. Four class periods, and one 1-hour laboratory practice. Not open for credit to students who have had three or more years of German in high school. Students who wish to continue in German but feel ill prepared should contact the head of the Modern and Classical Languages Department. Not open for credit to students who have passed GERM 111-112.

Fundamentals of German. Presentation of dialogues, conversation, vocabulary building, grammar and culture. Emphasis on speaking, oral comprehension, reading of simple texts and writing, to satisfy basic survival needs within a cultural setting.

133-134. Intermediate German I and II
Both semesters. Four credits each semester. Four class periods and one 1-hour laboratory practice. Prerequisite: GERM 132 or two years of high school German. Not open for credit to students who have passed GERM 113-114.

Review and extension of grammar, vocabulary expansion, graded composition, intensive and extensive reading, and intensive oral practice to further develop communicative abilities within a cultural setting.

145-146. German Readings in the Sciences and Humanities
Both semesters. Three credits each semester. Not open for credit to students who have passed GERM 131-132 or equivalent. May not be used to meet the undergraduate language requirement.

Basic grammar and intensive practice in reading expository prose in the natural sciences, social sciences, and humanities. Intended for students desiring to learn German as a tool for research. Will satisfy ACS and Ph.D. reading requirements.

153. Active Language Skills I
First semester. Two credits. Two class periods. Corequisite or prerequisite: GERM 133. Practice in audio-lingual skills.

Emphasis on everyday vocabulary. Recommended for students intending to travel or study abroad.

154. Active Language Skills II
Second semester. Two credits. Two class periods. Corequisite or prerequisite: GERM 134.

Additional practice in developing communicative abilities in a German-speaking country. Recommended for students intending to travel or study abroad.

169. Contemporary Germany: Society, Culture, and Everyday Life
Either semester. Three credits. Finger
This course familiarizes students with contemporary German society and the cultural and historical aspects that shape everyday life in Germany in the 21st century. Students will explore a range of topics, including reunification, minorities, education and youth, the arts, and gender.

171. The German Film
Either semester. Three credits. Readings and lectures in English. May not be used to meet the undergraduate foreign language requirement.

Weekly showings of German films from the twenties to the present. Introduction to film history, analysis and interpretation of films, outside readings, term papers.
190. German Folk Songs
Either semester. One credit. One 2-hour class period. May not be used to meet the undergraduate language requirement. May be repeated once for credit.

German folk songs and Christmas carols from the 15th to the 20th Century. Emphasis on correct pronunciation. Occasional performances on and off campus.

193. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head required, normally to be granted prior to the student’s departure.

Special topics taken in a foreign study program.

200. Intensive Language Practice
Second semester. Three credits. Hours by arrangement. Prerequisite: GERM 133 or equivalent and consent of instructor.

Two or three weeks of concentrated study in Europe. Exclusive use of the language, with three to four daily contact hours. Practice in all active and passive language skills, combined with periodic review sessions during the rest of the semester.

201-202. Composition
Both semesters. Three credits each semester. Prerequisite: GERM 134 or three years of German in high school. May only be used for transfer credit or for study abroad. Not open for credit to students who have passed GERM 233-234.

Intensive grammar review and extensive practice in writing.

204-205. Conversation
Both semesters. Three credits each semester. Prerequisite: GERM 134 or three years of German in high school. May only be used for transfer credit or for study abroad. Not open for credit to students who have passed GERM 233-234.

Intensive oral practice based primarily on cultural readings.

220. German Recitation in Applied Mechanics
First semester. One credit. One class period. Prerequisite or corequisite: GERM 133 or equivalent.

Technical German in engineering through the basic concepts and problem solving techniques used in applied mechanics.

221. Introduction to the Sciences in German
Second semester. One credit. One class period. Prerequisite or corequisite: GERM 134, CHEM 125Q, and PHYS 152Q or equivalent.

A series of lectures and discussion periods about basic concepts in the physical sciences presented in German. Topics will be primarily from the various engineering disciplines, chemistry, physics, and mathematics.

222. Fields of Technology
First semester. One credit. One class period. Prerequisite: GERM 220 and GERM 221.

A series of lectures and discussion periods on special topics in science and engineering. Open only with consent of instructor.

231-232. German for Professional Use I and II
Both semesters. Three credits each semester. Prerequisite: GERM 134 or equivalent. Recommended preparation: GERM 233-234.

Development of oral and written skills using a content-based methodology and drawing on authentic documents in a variety of formats that convey the language and culture of professional environments in the German-speaking countries. Preparation for the Goethe Institute’s test of German for Professional Purposes (Deutsch fär den Beruf).

233-234. Building Language Skills Through Culture I and II
Both semesters. Three credits each semester. Prerequisite: GERM 134 or equivalent. Not open for credit to students who have passed GERM 201-202 or GERM 204-205.

Development of oral and written skills using a content-based methodology and drawing on texts that deal with issues in contemporary culture of German-speaking countries. Emphasis on acquisition of a sophisticated understanding of cultural differences while building vocabulary, improving accuracy, and increasing facility in self-expression and communication.

240W. German Literature in Translation
Either semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. May not be used to satisfy the undergraduate foreign language requirement or the major requirement in German.

Reading and analysis of significant works of German literature from one or more periods.

245. German Grammar and Etymology
Either semester. Three credits. Corequisite: GERM 233 or equivalent or instructor consent.

German grammar and etymology for advanced students. A conceptual foundation for communicative language skills and comparison with English.

246. The Finishing Touch: A Capstone in German Studies
Either semester. Three credits. Prerequisite: German 234 plus a minimum of 6 additional 200-level credits in German.

A course in which advanced students assess and polish their German language skills, consolidate their learning in German Studies, and demonstrate that learning in a final project.

251. German Culture and Civilization
Either semester. Three credits. Conducted in English. Not open for credit to students who have passed GERM 250.

An interdisciplinary course on the German-speaking countries, analyzing cultural life and past and present development. Period or thematic emphasis may vary. Discussion of selected non-fictional and fictional readings, films, slides and recordings.

252. Studies in Early German Literature
Either semester. Three credits. Prerequisite or corequisite: GERM 233 or instructor consent.

Study of a cohesive group of texts that mark the periods of the Middle Ages, Humanism, Reformation, and Baroque. Emphasis may vary. Attention will be given to the relevant socio-historical context and, when possible, to the visual and performing arts.

253. Studies in German Literature Around 1800
Either semester. Three credits. Prerequisite or corequisite: GERM 233 or instructor consent.

Study of a cohesive group of texts that mark the periods of Enlightenment, Storm and Stress, Classicism and Early Romanticism. Emphasis may vary. Attention will be given to the relevant socio-historical context and to the visual and performing arts.

254. Studies in 19th Century German Literature
Either semester. Three credits. Prerequisite or corequisite: GERM 233 or instructor consent.

Study of a cohesive group of texts that mark the periods of Late Romanticism, Vörmärz, Realism and Naturalism. Emphasis may vary. Attention will be given to the relevant socio-historical context and to the visual and performing arts.

255. Studies in 20th Century German Literature
Either semester. Three credits. Prerequisite or corequisite: GERM 233 or instructor consent.

Study of a cohesive group of texts that mark the period. Attention will be given to the relevant socio-historical context and to the visual and performing arts.

260. Women’s Studies in German
Either semester. Three credits. Prerequisite or corequisite: GERM 234 or instructor consent.

Women in the literature of the German-speaking countries. Women’s writings. The development of German feminism. Contemporary gender issues in the German-speaking countries.

271. Principles of Translation I
First semester. Three credits. Prerequisite: GERM 234 or equivalent. Open only to juniors and seniors, with consent of instructor. Wright Theory and practice of translating and interpreting written and oral materials from German into English.

280W. Introduction to Germanic Linguistics
First semester. Three credits. Prerequisite: GERM 132 or LING 202 or instructor consent; ENGL 105 or 110 or 111 or 250. McCormick A study of the relationship among modern and historical Germanic languages. Lectures, readings, and class discussions in English.

281. German Film and Culture
Either semester. Three credits. Prerequisite or corequisite: GERM 233.

Critical analysis of artistic issues in writing screenplays and making movies. Dynamic interplay between German film, the other arts, and their socioeconomic context. Taught in German.

First semester. Three credits. Taught in English.

Cultural aspects of international business. Lectures by speakers from the German-speaking countries and representatives of institutions and companies related to those countries. Discussion and analysis of the lectures.

285. Topics in German Culture
Either semester. Three credits. Prerequisite or corequisite: GERM 233 or instructor consent. With a change in topic, this course may be repeated for credit.

An analysis of the cultural trends of a selected period or theme in a German-speaking country, taking into account the historical, political, and socioeconomic background, aspects of daily life, philosophical trends, major literary works and other artistic achievements in art, music, and architecture. Specialists from other departments will be invited as guest lecturers.

290. German Language Practicum
Either semester or summer. Credits (not to exceed six) and hours by arrangement. Prerequisite: Three years of college-level German or the equivalent. Open only to juniors and seniors with consent of instructor.

Placement of students as trainees in business, industry and social or government agencies where foreign language skills can be put to use.

293. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head required, normally to be granted prior to the student’s departure. May count toward the major with consent of advisor.

Special topics taken in a foreign study program.

295. German Play Production
Second semester. Three credits. Hours by arrangement. Prerequisite: GERM 111 or 131 and consent of instructor. May not be used to meet the undergraduate foreign language requirement. With a change in topic, this course may be repeated for credit.

Extensive and intensive study, discussion and interpretation of a German drama, followed by casting.
rehearsals and eventual performance. Students are given both on-stage and off-stage assignments and responsibilities. Term paper.

296. German Seminar
Either semester. Credits and hours by arrangement. Open only to juniors and seniors with consent of instructor. May be repeated for credit.

Intensive investigation of selected problems in German language and/or German studies.

297. Variable Topics
Either semester. Three credits. With a change in topic, may be repeated for credit. Prerequisites and recommended preparation vary.

298. Special Topics
Either semester. Credits and hours by arrangement. With a change in content, may be repeated for credit. Prerequisites and recommended preparation vary.

299. Independent Study
Either or both semesters. Credits and hours by arrangement. Open only with consent of instructor. With a change in content, may be repeated for credit.

German Study Abroad. An academic year or spring semester at the University of Salzburg, Austria, operated jointly with other New England state universities, allows students to earn up to 34 credits in all disciplines. The University of Connecticut sponsors a variety of programs at any of nine universities in the state of Baden-Wuerttemberg. Students also have the possibility of language study at a Goethe Institute, and a combination of study and work through programs in Mannheim and Regensburg.

Health Sciences (HESC)

Head of Department: Professor Thomas Miller
Department Office: Room 323, Koons Hall

298. Special Topics
Either semester and summer session. Credits and hours by arrangement. Open only with consent of instructor. May be repeated for credit.

Investigation of special topics in health sciences that are related to basic core interdisciplinary areas.

299. Independent Study for Undergraduates
Either semester. Credits and hours by arrangement: not to exceed four credits. Open only with consent of instructor. May be repeated for credit.

This course is designed primarily for students who wish to extend their knowledge in some specialized subject in the field of health sciences.

Health Systems Management (HSMG)

Director: Jeffrey A. Kramer
Center Office: Room 462, School of Business

For major requirements, see the School of Business section of this Catalog.

Health Systems Management courses are open to juniors and seniors only. The School of Business requires students at the Storrs campus to participate in the Mobile Computing Initiative before registering for the courses listed below. See the School of Business Catalog section for details about how this program operates. Students not participating in the initiative may be able to register for the following classes: HSMG 280 and 283.

280. Introduction to Health Care Management
First semester. Three credits.

This course introduces basic concepts, principles, and practices associated with the health care delivery system in the United States. The course will examine how this system is organized, and discuss the major issues related to the provision of health care, from both a business and social science perspective. Emphasis will be placed on understanding the components and features of the health care delivery system in the United States as it is developed and applied through a managed care organizational framework.

281. Health Care Analysis
Second semester. Three credits. Prerequisite: HSMG 280.

This course deals with the application of economic theory, health services research, policy development and analysis, operations research, and management science techniques for analyzing and evaluating the performance of health care services and organizations.

282. Health Care Information Technology
First semester. Three credits. Prerequisite: HSMG 281 and 290.

This course provides an introduction to information technology (IT) within the context of health care planning, managerial decision-making and strategic analysis. The course examines how health care organizations employ information technologies in all decision-making and considers factors that influence investments in healthcare IT. Students will learn to define appropriate IT terms, fit IT into an appropriate marketing plan, describe the IT project lifecycle, and identify key IT issues within the major healthcare markets. Topics include business model development, branding of services, and decision support.

283. Advanced Topics in Health Care Management
Second semester. Three credits. Prerequisites: HSMG 280, 281, and 290.

This course provides health care management students with opportunities to apply tools and concepts learned throughout the program. Through real world consulting projects and hands-on projects, students develop and refine their skills in project organization and management, analysis, reporting, and presentation. Project areas include applications that integrate all business disciplines.

285. Clinical and Social Issues in Health Care
First semester. Three credits.

This course covers clinical and social issues affecting health care provider organizations, such as the health needs of special population groups, public health concerns, epidemiological issues, and health care quality. Discussion will include how health care organizations address such issues through methods including clinical studies, disease management, partnership between private and public sectors, and legislative initiatives.

290W. Internship in Health Care Management
Either or both semesters. Six credits. Hours by arrangement. Prerequisite: OPIM 203 and 204, senior standing, and consent of instructor; ENGL 105 or 110 or 111 or 250.

Supervised field work in a health care organization where students work with health care professionals to expand their expertise in solving health systems problems and increase their awareness of the issues involved in the day to day operations of a health care institution. Student performance will be evaluated on the basis of an appraisal by the field supervisor and a detailed written report submitted by the student.

298. Special Topics
Either semester. Credits and hours by arrangement. Prerequisite: Announced separately for each offering. With a change in content, may be repeated for credit.

Classroom course in special topics in health systems management as announced in advance for semester.

299. Independent Study for Undergraduates
Either or both semesters. Credits by arrangement; not to exceed six in any semester. Open only with consent of instructor.

Individual study of special topics in health systems management as mutually arranged between a student and an instructor.

Hebrew (HEB)

Head of Department: Professor David K. Herzberger
Department Office: Room 228, J.H. Arjona Building
Consult the Departmental Handbook for courses being offered and further description of these courses.

149-150. Elementary Biblical Hebrew I and II
Both semesters. Four credits each semester. Four class periods. Not open for credit to students who have had three or more years of Hebrew in high school.


151-152. Elementary Modern Hebrew I and II
Both semesters. Four credits each semester. Four class periods and one 1-hour laboratory practice. Not open for credit to students who have had three or more years of Hebrew in high school.


153-154. Intermediate Hebrew I and II
Both semesters. Four credits each semester. Four class periods and one 1-hour laboratory practice. Prerequisite: HEB 152 or the equivalent.


251-252. Advanced Hebrew
Both semesters. Three credits each semester. Prerequisite: HEB 154 or instructor consent.

Further grammar study. Practice in composition involving the use of everyday vocabulary and idiomatic expressions. Readings in Hebrew culture and history.

Hebrew Civilization (in English)

None of the following courses may be used to meet the foreign language requirement.

101. The Land of Israel from Biblical Times to the Present
(Also offered as JUDS 101.) Either semester. Three credits. Offered in alternate years. Miller

An in-depth look at the history, culture and civilizations of the land of Israel. The importance of the land in Judaism and its significance for Christianity and Islam will be discussed. Lectures and discussion will be enhanced by slide presentations.

103. Literature and Civilization of the Jewish People
(Also offered as JUDS 103.) Either semester. Three credits. Miller

The major concepts, personalities and literary works of the Hebraic tradition from the Biblical and Talmudic periods to the present.

104. Modern Jewish Thought
(Also offered as JUDS Studies 104.) Second semester. Three credits.

Nationalism, culture, ethics and philosophy in the
writings of the major Jewish thinkers from Spinoza to the present. Emphasis will be placed on the work of Moses Mendelssohn, Nachman Krochmal, Ahad Haam, Hermann Cohen, Franz Rosenzweig, Martin Buber and Mordecai Kaplan.

201. Selected Books of the Hebrew Bible
(Also offered as JUDS 201.) Either semester. Three credits. Prerequisite: INTD 294 or HIST 213 or HEB 103, which may be taken concurrently or instructor consent. A knowledge of Hebrew is not required. May be repeated with change of content and consent of instructor. Miller

Focus on a biblical book (or books) and emphasizes its literary structure and content using modern approaches as well as midrashic and medieval exegesis. Historical and archaeological material introduced where relevant.

202. Sects and Movements in Judaism
(Also offered as JUDS 202.) Either semester. Three credits. Offered in alternate years. Varieties of Jewish expression and belief from Biblical times to the present. Topics include: the Dead Sea Sect, Pharisees, Sadducees, Karaites, Marranos, Hasidism and the Reform, Conservative, Orthodox and Reconstructionist movements of the modern era.

203. The Holocaust
(Also offered as JUDS 203.) Either semester. Three credits. A discussion of the Holocaust to be preceded by an examination of the roots of anti-semitism and its effect upon the Jewish experience. Special emphasis will be given to the impact of the Holocaust on Jewish and Christian thought.

218. Palestine Under the Greeks and Romans
(Also offered as CAMS 256, HIST 218, and JUDS 218.) Either semester. Three credits. Recommended preparation: HIST 213 or 214 or 216 or INTD 294 or HEB 202. Miller

The political, historical and religious currents in Greco-Roman Palestine. Includes the Jewish Revolts: sectarian developments, the rise of Christianity and the Talmudic academies.

277. The Culture of East European Jewry
First semester. Three credits. The life, folklore, literature and thought of the Jews of Poland and Russia from the sixteenth to the twentieth century. The distinctive contributions of both the Jewish little-town (shtetl) and the larger urban community will be explored.

279. Literature of Modern Israel
Second semester. Three credits. The major themes and literary achievements of modern Hebrew writing. Authors to be emphasized include Feierberg, Bialik, Brenner, Berdichevsky, Tschernichowsky, Agnon, Greenberg, and Alterman.

193. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head required, normally before the student’s departure.

Special topics taken in a foreign study program.

293. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of Department Head required, normally granted prior to the student’s departure. May count toward the major with consent of the advisor.

Special topics taken in a foreign study program.

295. Variable Topics
Either semester. Three credits. With a change in topic, may be repeated for credit. Prerequisites and recommended preparation vary.

296. Special Topics
Either semester. Credits and hours by arrangement. With a change in content, may be repeated for credit. Prerequisites and recommended preparation vary.

299. Independent Study
Either or both semesters. Credits and hours by arrangement. Open only with consent of instructor. With a change in content, may be repeated for credit.

Study Abroad in Israel.
Students may spend a semester or academic year at Hebrew University in Jerusalem, Tel Aviv, Haifa or Ben Gurion Universities. Students should take at least one semester of Hebrew at UConn before studying abroad. The University also sponsors an archaeological excavation at Sepphoris during the month of June. This is a six-credit program.

Hindi (HIND)

Head of Department: Professor David K. Herberger
Department Office: Room 228, J.H. Arjona Building

101-102. Elementary Levels I and II
103-104. Intermediate Levels I and II

101 and 103 are offered in the first semester, and 102 and 104 in the second. Please refer to the Critical Languages course descriptions in this publication. Consult the Program Director in Arjona 128 or at Ed.Benson@UConn.edu for more information.

History (HIST)

Head of Department: Professor Alitina L. Waller
Department Office: Room 121, Wood Hall

For major requirements, see the College of Liberal Arts and Sciences section of this Catalog.

100. The Roots of the Western Experience
Either semester. Three credits.

An analysis of the traditions and changes which have shaped Western political institutions, economic systems, social structures and culture in ancient and medieval times.

101. Modern Western Traditions
Either semester. Three credits.

History of political institutions, economic systems, social structures, and cultures in the modern Western world.

106. The Roots of Traditional Asia
Either semester. Three credits.

A survey of the early development and staying power of the traditional cultures from which the major societies of modern Asia have evolved.

108. Modern World History
Either semester. Three credits. Nwokeji, Omara-Otunbo

A survey of the historical experiences of the world’s major civilizations during recent centuries with particular attention to the modernization of the traditional cultures of Asia, Latin America, and Africa.

121. Women in History
Either semester. Three credits. I. Brown

The historical roots of challenges faced by contemporary women as revealed in the European and/or American experience; the political, economic, legal, religious, and family life of women.

195. Special Topics Lecture
Either semester. Credits, prerequisites, and hours as determined by the Senate Curricula and Courses Committee. May be repeated for credit with a change in topic.

198. Varieties of History
Either semester. Three credits. With a change in content may be repeated for credit.

A major topic in history through contemporary sources and historical interpretations.

200W. Senior Thesis in History
Either semester. Three credits. Hours by arrangement. Open only with consent of instructor and Department Head. Independent study authorization form required. Prerequisite: Three credits of independent study and/or an advanced seminar; ENGL 105 or 110 or 111 or 250.

201. Supervised Field Work
Either semester. Credits up to 12. No more than six credits will count toward the department’s major requirements. Hours by arrangement. Open only with consent of Department Head.

Internship in applied history.

203W. History and the Historian
First semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Langer

Major historical theories and writings from the ancient world to the modern era. For History Honors and other qualified students.

204. Medieval Islamic Civilization to 1700
First semester. Three credits. Recommended preparation: HIST 100 or 101. Open to sophomores or higher. Azimiri

The social dynamics of faith, culture, and change from the rise of Islam to the Ottoman decline and the Islamic challenge to Greek and Latin Christendom.

205. The Modern Middle East from 1700 to the Present
Second semester. Three credits. Open to sophomores or higher. Azimiri

Tradition, change, modernization and development in the Middle East from the Ottoman decline and rise of successor states to the Arab-Israeli and oil crises.

206. Introduction to the History of Science
(Also offered as SCI 206.) First semester. Three credits. Open to sophomores or higher. Roe

Science in the United States and Europe since 1850. Genetics and eugenics; ecology and the environment; nuclear issues; gender, race, and science.

207W. Science and Social Issues in the Modern World
Second semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Roe

Social context of science in the United States and Europe since 1850. Genetics and eugenics; ecology and the environment; nuclear issues; gender, race, and science.

209. History of the Family
(Also offered as HDFS 279.) Either semester. Three credits. Not open for credit to students who have passed HDFS 279. I. Brown

Pre-industrial and industrial family life in Western society since the Middle Ages, with emphasis on the changes in demography, family size and structure, family economy, social expectations, sex roles, sexuality, and affective bonds.

210. History of Women and Gender in Early America
(Also offered as WS 210.) Either semester. Three credits. Not open to students who have taken HIST 202 or WS 202. Dayton

Comparative study of women’s work, marriage and divorce, witch-
hunting, masculinity, and women’s Revolutionary War roles. For U.S. women’s history, 1790 to present, see HIST 215.

211. The Historian’s Craft
Either seminar. Three credits. Open only to history majors. Open to sophomores or higher.
Learning critical reading, thinking and writing skills by interpreting a variety of primary sources.

212W. Near Eastern Pre-History
(Also offered as ANTH 257W.) Second seminar. Three credits. Not open for credit to students who have passed ANTH 257. Prerequisite: ENGL 105 or 110 or 111 or 250.
From the earliest hunter-gatherers to the rise of the state: the transition from food-gathering to food-producing and the development of complex societies in the Near East.

213. Ancient Near East
(Also offered as CAMS 253.) Either seminar. Three credits.
The history of Near Eastern civilization from the Neolithic period to the Persian Empire. The birth of civilization in Mesopotamia and Egypt. The political, economic, social, and cultural achievements of ancient Near Eastern peoples.

214. Ancient Greece
(Also offered as CAMS 254.) Either seminar. Three credits. Caner
The history of Greece from Minoan and Mycenaean times into the Hellenistic period with special emphasis on the Fifth Century and the “Golden Age” of Athens.

214W. Ancient Greece
Prerequisite: ENGL 105 or 110 or 111 or 250.

215. History of Women and Gender in the United States, 1790-Present
(Also offered as WS 215.) Either seminar. Three credits. Not open for credit to students who have taken HIST 202 or WS 202 before fall 1998. Porter-Benson
Women and gender in family, work, education, politics, and religion. Impact of age, race, ethnicity, region, class, and affective preference on women’s lives. Changing definitions of womanhood and manhood.

216. Ancient Rome
(Also offered as CAMS 255.) Either seminar. Three credits. Caner
From the beginning of Rome to the reign of Justinian. The growth of the Roman Republic and Empire, Roman civilization and its influence upon later history.

216W. Ancient Rome
Prerequisite: ENGL 105 or 110 or 111 or 250.

217. World of Late Antiquity
(Also offered as CAMS 243.) Either seminar. Three credits. Caner
The profound social and cultural changes that redefined the cities, frontiers, and economies of the classical world and led to the Middle Ages. Developments in the eastern and western Mediterranean lands between the second and seventh centuries, including neo-Platonism, the spread of Christianity, Rabbinic Judaism, and Islam.

218. Palestine Under the Greeks and Romans
(Also offered as CAMS 256, HEB 218, and JUDS 218.) Either seminar. Three credits. Recommended preparation: HIST 213 or 214 or 216 or INTD 294 or HEB 202. Miller
The political, historical and religious currents in Greco-Roman Palestine. Includes the Jewish Revolts, sectarian developments, the rise of Christianity and the Talmudic academies.

219. Early Middle Ages
First semester. Three credits. Olson
The decline of Rome, rise of Christianity, the barbarian invasions and kingdoms, culminating in the civilizations of the Carolingian Empire, of Byzantium, and of Islam.

220. The High Middle Ages
Second semester. Three credits. Olson
The history of Europe from the tenth through the fourteenth centuries. The development and expansion of European civilization, the revival of a money economy and town life, the development of feudal monarchy, the conflict of Empire and Papacy, the Crusades.

221. Modern China
Either semester. Three credits. Wang
Survey of patterns of modern China since 1800. Topics will include reforms and revolutions, industrialization and urbanization, and family and population growth.

222. History of Pre-Colonial Africa
First semester. Three credits. Nwokoji, Omara-Otunnu
The history of pre-colonial Africa with particular attention to the rise and fall of African kingdoms, interaction between different ethnic groups, African trade with other continents, and the impact of foreigners on African societies.

223. History of Modern Africa
Second semester. Three credits. Omara-Otunnu
The history of African perceptions of and responses to the abolition of the slave trade, Western imperialism and colonialism, and the development of nationalism and struggle for independence.

224. History of Pan-Africanism
Second semester. Three credits. Recommended preparation: At least one of the following, HIST 222, 223, 238, or 246. Omara-Otunnu
The development of ideas of Pan-Africanism, beginning with the proto-Pan-Africanists in the nineteenth century; examination of the linkages between those ideas in Africa and the evolution of Pan-Africanism as a movement in the African Diaspora.

225. History of War in the Modern World
Either semester. Three credits. Recommended preparation: HIST 101. Open to sophomores or higher.
Selected topics analyzing the interactions of warfare, military theories and practice with social, economic and technological developments since 1815.

226. International Human Rights
Either semester. Three credits. Open to sophomores or higher.
Historical and theoretical survey of the evolution of human rights since 1945.

227. Social and Cultural History of Connecticut and New England
(Also offered as CAMS 295.) Either seminar. Three credits. Dayton, Baldwin, Brown
Race, class, gender, religion, politics, and economy in New England. Interpretations of the region’s culture from the 1600’s through the 1800’s. Introduces accessible primary sources and interpretive issues at public history sites.

228. Europe in the Nineteenth Century
First semester. Three credits. Open to sophomores or higher. Recommended preparation: HIST 101.
This course examines the Restoration, the mid-century revolutions, and the forces of nationalism, liberalism and imperialism. New social and economic movements and currents of thought are described and explored.

229. Europe in the Twentieth Century
Twentieth Century Europe and its world relationships in the era of two world wars, the great depression, and the cold war.

230. American History to 1877: A Survey
Either seminar. Three credits. Open to sophomores or higher.
Political, social, and economic development of the American people through post-Civil War Reconstruction.

231. American History to 1877: A Survey
Prerequisite: ENGL 105 or 110 or 111 or 250.

232. American History Since 1877: A Survey
Either seminar. Three credits. Open to sophomores or higher.
Political, social, and economic development of the American people from Reconstruction to the present.

232W. American History Since 1877: A Survey
Prerequisite: ENGL 105 or 110 or 111 or 250.

233. Social and Intellectual History of the United States through the Civil War
First semester. Three credits. Recommended preparation: HIST 231 or instructor consent. Brown
This course stresses the impact of political, economic, and social changes on American thought.

234. American Thought and Society Since the Late Nineteenth Century
The interaction of popular ideas and formal thought with society in the United States during a time of world-wide crises and unrest. Social Darwinism, Populism, reformism, racism, radicalism, liberalism, conservatism, and other ideologies and movements.

235. Constitutional History of the United States
The Constitution and the Supreme Court in relation to the political, economic, and intellectual history of the United States.

236. Civil War America
The social, economic, and cultural forces that shaped the Civil War and its aftermath. Sectional conflict, industrialization, reform and abolitionism, race relations, and class, gender and constitutional issues from the 1830s to the 1880s.

237. American Indian History
Either semester. Three credits. Recommended preparation: HIST 231. Shoemaker
Surveys American Indian history in what is now the United States from precolonial times up to the present. Cultural diversity among Indian peoples, the effects of European contact, tribal sovereignty, and other current issues.

238. African American History to 1865
Either semester. Three credits. Ogbar
History of African-American people to 1865, from their West African roots, to their presence in colonial America, through enslavement and emancipation. Adaptation and resistance to their conditions in North America.
238W. African American History to 1865
Prerequisite: ENGL 105 or 110 or 111 or 250.

239. History of Connecticut
First semester in odd-numbered years. Three credits. Recommended preparation: HIST 231 or 232. Either 239 or 227; but not both, may be counted for credit toward the History major.
A survey of Connecticut's history from 1633 to the present from a constitutional and political perspective.

240W. History Workshop: Topics in American Society and Culture
Either semester. Three credits. Open to sophomores or higher. Prerequisite: ENGL 105 or 110 or 111 or 250. Recommended preparation: HIST 231 or 232.

241. The History of Urban America
(Also offered as URBN 241.) Either semester. Three credits. Baldwin
The development of Urban America with emphasis on social, political, physical, and environmental change in the industrial city.

241W. The History of Urban America
(Also offered as URBN 241W.) Prerequisite: ENGL 105 or 110 or 111 or 250.

242. Work and Workers in American Society
Either semester. Three credits. Porter-Benson
Changes in work from the 17th through the 20th centuries. Workers' experiences, ideologies, and activities as shaped by gender, race/ethnicity, region, occupation, and industry.

243. The Establishment of the American Colonies
First semester. Three credits. Recommended preparation: HIST 231. Dayton, Shoemaker
Examines the context in which Europeans undertook settlement of North America, and the nature of the Indian response. Emphasis on the development of social, political, and religious institutions in the seventeenth century and in the increasingly ethnically and racially mixed cultures of the eighteenth century.

243W. The Establishment of the American Colonies
Prerequisite: ENGL 105 or 110 or 111 or 250. Recommended preparation: HIST 231.

244. The American Revolution
Creation of the United States of America from the beginnings of the independence movement through the adoption of the Constitution and Bill of Rights.

245. Atlantic Voyages
Either semester. Three credits. Jensen
Seafaring and society since the age of Columbus. Emphasis on the Anglo-American experience.

246. African American History Since 1865
Either semester. Three credits. Ogbar

246W. African American History Since 1865
Prerequisite: ENGL 105 or 110 or 111 or 250.

247. Immigrants and the Shaping of American History
The origins of immigration to the United States and the interaction of immigrants with the social, political, and economic life of the nation after 1789, with emphasis on such topics as nativism, assimilation, and the "ethnic legacy."

248. U.S. Legal History
Either semester. Three credits. With change in content, may be repeated for credit. Dayton
Introduction to legal culture and appellate case materials from the eighteenth through the twentieth centuries. Topics include: child custody and family law, the courts' role in industrial development, the law of slavery and freedom in the North, and various aspects of civil rights.

248W. U.S. Legal History
Prerequisite: ENGL 105 or 110 or 111 or 250.

249. Rise of U.S. Global Power
Either semester. Three credits. Recommended preparation: HIST 231 or 232. Costigliola
The people and ideas that powered the growth of America's global empire. Emphasis on the world wars, the Cold War, the Vietnam War, intervention in Latin America, and the global economy.

250. Byzantium
Either semester. Three credits. Langer
A survey of the major developments from the fourth through the fifteenth centuries: religious controversies, the theme system, the Crusades, Byzantine civilization, its law, art, literature, and its impact upon European and Russian civilization.

251. Medieval and Imperial Russia to 1855
First semester. Three credits. Langer
The development of Russia from the emergence of the Slavs to the reign of Alexander II. Russian political institutions, orthodoxy and cultural traditions, nobility, peasantry, and townspeople.

252. History of Russia Since 1855
Continuation of History 251. Late imperial Russia, the former Soviet Union, and contemporary Russia.

253. The History of Human Rights
Either semester. Three credits.
Case studies in the emergence and evolution of human rights as experience and concept.

254W. The Habsburg Monarchy and Its Peoples, 1740-1918
Second semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Recommended preparation: HIST 101.

255. Germany from the Reformation to 1815
First semester. Three credits. Bergmann
The rise and fall of the multinational, dynastic state of the Habsburgs, with emphasis upon those forces which sustained it through the nineteenth century and those which brought its collapse in 1918.

256. Germany Since 1815
Second semester. Three credits. Bergmann
A study of German political, social, and intellectual history since the Napoleonic Wars. This course also considers European and world problems as reflected in the emergence of Germany as a pivotal force in international affairs.

257. The Early Church and Christian Thought
(Also offered as CAMS 250.) Either semester. Three credits. Recommended preparation: HIST 216 or CAMS 255. Cuner
A critical approach to the evolution of Christian thought, social organization and institutions ca. 50-450 C.E. Topics include gnosticism, apostolic succession, heresy, orthodoxy.

258. Intellectual and Social History of Europe in the Nineteenth Century
First semester. Three credits. Bergmann
The thought and feeling of Europeans in their social context.

258W. Intellectual and Social History of Europe in the Nineteenth Century
Prerequisite: ENGL 105 or 110 or 111 or 250.

259. Intellectual and Social History of Europe in the Twentieth Century
Second semester. Three credits. Bergmann
A continuation of HIST 258.

259W. Intellectual and Social History of Europe in the Twentieth Century
Prerequisite: ENGL 105 or 110 or 111 or 250.

260. Hip-Hop, Politics and Youth Culture in America
Either semester. Three credits. Ogbar
History of hip-hop, its musical antecedents and its role in popular culture. Race, class, and gender are examined as well as hip-hop's role in popular political discourse.

261. English History to 1603
First semester. Three credits. Open to sophomores or higher. Olson
A survey of English history from its origin to the close of the Tudor period. Emphasis is placed on the development of the English nation and the growth of its culture. Recommended to majors in English.

262. History of Modern England
Second semester. Three credits. Open to sophomores or higher. Watson
Cultural, political, economic, and intellectual development of modern Britain, with special emphasis on changing ideas of national identity.

264. Social and Economic History of Modern Britain
First semester. Three credits. Watson
The change from an agrarian to an industrial society.

265. History of Ireland
Either semester. Three credits. Canning
History of Ireland, with emphasis on the modern period. The rise of Irish nationalism, the Irish Literary Revival, and the problems of Northern Ireland.

267. Italy 1250-1600
Either semester. Three credits. Gouwens
Italy from the triumph of the city-state and the popolo grosso to the end of the Renaissance. The complex interrelationship between society and culture will be the focus of study.

268. Japanese Americans and World War II
(Also offered as AASI 268.) First semester. Three credits. Buckley
The events leading to martial law and executive order 9066, the wartime experience of Japanese Americans, and national consequences.
269. The Modernization of Italy from 1815 to Present
Second semester. Three credits. Open to sophomores or higher. Davis
The modernization of Italy's traditional sociopolitical and economic structure; Industrialization, unification, the liberal regime, fascism, and the republic.

270. Variable Topics
Either semester. Three credits. With a change in topic, may be repeated for credit. Prerequisites and recommended preparation vary.

271. The Renaissance
First semester. Three credits. Goonens
Europe in the fourteenth and fifteenth centuries.

272. The Reformation
Second semester. Three credits. Europe in the sixteenth century with emphasis on religious developments, rise of the modern state, birth of science, expansion of Europe, and the Commercial Revolution.

273. Europe in the Seventeenth Century
First semester. Three credits. Conflict of constitutionalism and absolutism, colonial expansion and rivalry, development of science, and the age of reason, the age of the baroque, the age of Louis XIV.

274. Europe in the Eighteenth Century
Second semester. Three credits. Intellectual, political, and socioeconomic developments in Europe from 1713 to 1789.

275. Latin America and the Great Powers
First semester. Three credits. Goodwin
Great power diplomatic, commercial, and cultural relations with Latin America from the end of the colonial period to the present. Emphasis on the United States and Great Britain.

276. Andean Societies
Second semester. Three credits. Recommended preparation: HIST 281 or 282. Spalding
History of the geographical and social region occupied by the Inca Empire: pre-Columbian cultures, the period of Spanish colonial rule, and the modern Andean republics (primarily Ecuador, Peru, and Bolivia).

277. Modern India
Also offered as AASI 277. Either semester. Three credits. Buckley
An introduction to the history of India from the Mughal and European invasions of the 16th Century to the present. India's synthesis of Eastern and Western culture, traditional and new, will be the focus.

278. History of Latino/as in the United States
Also offered as PRLS 220. Either semester. Three credits. Silvestrini
Settlement and growth of Hispanic-origin population in the United States today, from Spanish and Mexican settlement of western United States to the growth of Latino communities. Student oral history project.

279. France Since 1715
Second semester. Three credits. Schafer
The disintegration of the monarchical synthesis prior to and during the French Revolution; the attempts to harmonize French society under subsequent regimes.

280W. Mexico in the Nineteenth and Twentieth Centuries
Second semester. Three credits. Prerequisite: ENGL 105 or 110 or 250. Recommended preparation: HIST 281.
The emergence of modern Mexico from independence to the present with emphasis on the Revolution of 1910.

281. Latin America in the Colonial Period
First semester. Three credits. Open to sophomores or higher. Spalding
Pre-Columbian Civilization in America, the epoch of conquest and settlement, together with a study of the Ibero-Indian cultural synthesis which forms the basis of modern Latin American civilization.

282. Latin America in the National Period
Second semester. Three credits. Open to sophomores or higher. Goodwin, Silvestrini
Representative countries in North, Central, and South America and the Caribbean together with the historic development of inter-American relations and contemporary Latin American problems.

283W. The Hispanic World in the Ages of Reason and Revolution
First semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Recommended preparation: HIST 281, Silvestrini
The transformation of Spanish America from the Bourbon period in 1700, through the wars of independence and the struggle to build stable national states in the Nineteenth Century.

284. Latinos/as and Human Rights
Also offered as PRLS 221. Either semester. Three credits. Silvestrini
Latin/o/a issues related to human, civil and cultural rights, and gender differences.

285. Cuba, Puerto Rico, and the Spanish Caribbean
First semester. Three credits. Silvestrini
Discovery and settlement, slavery and plantation economy, recent political and economic developments, and United States relations with the Spanish Caribbean.

286. Argentina and LaPlata Region
First semester. Three credits. Recommended preparation: HIST 281 or 282. Goodwin
Colonial heritage, social and economic transformation of Argentina, Uruguay and Paraguay, foreign relations and contemporary turmoil.

287. East Asia to the Mid-Nineteenth Century
Also offered as AASI 287. First semester. Three credits. Wang
The major problems and issues of traditional Chinese and Japanese history and historiography. Special emphasis on the “Great Tradition” in ideas of both civilizations.

287W. East Asia to the Mid-Nineteenth Century
Also offered as AASI 287W. Prerequisite: ENGL 105 or 110 or 111 or 250.

288. East Asia Since the Mid-Nineteenth Century
Also offered as AASI 288. Second semester. Three credits. Wang
The reactions of East Asia to the Western threat, and the rise of Asian nationalism, communism, and fascism. Special attention to the tensions caused by the conflict of ideas.

288W. East Asia Since the Mid-Nineteenth Century
Also offered as AASI 288W. Prerequisite: ENGL 105 or 110 or 111 or 250.

289. War and Diplomacy in East Asia
First semester. Three credits.
European struggle for power in Asia since 1842, in the context of the rise of Japan and the reassertion of Chinese power.

290. The Middle East Crucible
First semester. Three credits. Azimi
Twentieth-century issues in the Middle East heartland with analysis focusing on the Ottoman heritage, nationalism, Arab-Israeli and other conflicts, Islam, oil, water, rapid sociopolitical change, trends in development, super-power rivalries, and the search for identity, independence, and peace with justice.

291. Personality and Power in the Twentieth Century
Second semester. Three credits. Dynamic leadership in historical crises, including, for example, Churchill, Roosevelt, Stalin, Hitler, DeGaulle, Kennedy, and Mao.

292W. Biography as History
Second semester. Three credits. Two class periods of 75 minutes. Prerequisite: ENGL 105 or 110 or 111 or 250. Open to sophomores or higher.
What the lives of significant individuals reveal about major historical periods and themes. Variable topics.

293. Foreign Study
Either or both semesters. Credits and hours by arrangement. May be repeated for credit. Consent of department head required, normally to be granted before the student's departure. May count toward the major with consent of the advisor.

294. Asian-American Experience Since 1850
Also offered as AASI 294. Either semester. Three credits. Wang
Survey of Asian-American experiences in the United States since 1850. Responses by Asian-Americans to both opportunities and discrimination.

295W. History through Fiction
Either semester. Three credits. Prerequisite: ENGL 105 or 110 or 111 or 250. Open to sophomores or higher. Recommended preparation: HIST 231 or 232 (if American perspective) or HIST 228 or 229 (if European perspective).
What classic novels and other works of fiction reveal about major historical periods and themes in history. Variable topics. May be offered from an American or European perspective.

296. Directed Research
Either or both semesters. Three credits. Open only to senior history majors.
An introduction to research methods and resources in history.

297W. Senior Seminar
Either semester. Three credits. Prerequisite or corequisite: HIST 211. Prerequisite: ENGL 105 or 110 or 111 or 250. Open only to undergraduate history majors in their senior year. With a change in content, may be repeated for credit.
These seminars give students the experience of reading critically and in depth in primary and secondary sources, and of developing and defending a position as an historian does.

298. Special Topics
Either semester. Credits and hours by arrangement. With a change of content, may be repeated for credit. Prerequisites and recommended preparation vary.

299. Independent Study
Either or both semesters. Credits and hours by arrangement. Open only with consent of instructor. With a change of content, may be repeated for credit.