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*Course Descriptions*

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Descriptions of all courses offered for undergraduate credit are arranged alphabetically by academic discipline on the following pages. Not all courses are available every term. A schedule of classes is available before the registration period for each term as an announcement of course offerings. Students are advised to consult these schedules prior to registration. The University reserves the right to withdraw any course on the grounds of insufficient enrollment.

## *Course Numbering*

USC Upstate courses numbered from 001 to 599 may be taken for undergraduate credit. The following distinctions are made among course numbers:

**001-100** Developmental courses. Credit earned cannot be applied to degree programs.

**101-299** Lower division courses primarily for students with freshman and sophomore standing.

**300-499** Upper division courses primarily for students with junior and senior standing.

**400-599** Upper division courses primarily for students with senior standing.

With consent of the advisor, a student may take courses numbered above or below the level normally taken by their academic classification (freshman, sophomore, junior or senior).

## *Course Credit*

The credit value of each course is usually determined by the number of class meetings per week for one semester. Two or three laboratory hours (one period) are equivalent to one class meeting. The semester hour credit for each course is included in each course description.

## *Prerequisites*

Students may be removed from any class for which prerequisites or other defined requirements have not been met.

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## **American Studies (SAMS)**

**101. American Studies, 17th-19th Century (3)** A survey of the historical, political, social, economic and cultural forces that shaped American life from the early seventeenth to the late nineteenth century.

**102. American Studies, 20th Century (3)** A survey of the historical, political, social, economic and cultural forces that have shaped American life in the twentieth century.

**398. Topics in American Studies (3)** Interdisciplinary reading and research on selected aspects of American culture. May be taken more than once if the topic is different. Prerequisite: SAMS 101 or 102, junior/senior standing, or consent of instructor.

**399. Independent Study (1-3)** An individualized, contracted program of study planned in conjunction with a faculty member. Prerequisite: consent of instructor.

## **Anthropology (SANT)**

**102. Understanding Other Cultures (3)** Introduction to the concepts, methods and data of socio-cultural anthropology and anthropological linguistics.

## **Art Education (SAED)**

**329. Art for Elementary and Middle Schools (3)** The teaching of art with major emphasis on integration within content areas. Two lecture hours and one laboratory hour per week.

## **Art History (SATH)**

**101. Introduction to Art (3)** Formal, historical and iconographic analysis of architectural monuments, paintings and sculpture; aspects of various theories of art and architecture.

**105. History of Western Art: Prehistory-Middle Ages (3)** Survey of the visual arts from the Paleolithic times to the Medieval period, with emphasis on the major civilizations of Egypt, the Ancient Near East, Rome, Byzantium and Medieval Europe.

**106. History of Western Art: Renaissance-Present (3)** Survey of the visual arts in Western civilizations from the Renaissance to the present.

**205. History of American Art (3)** Colonial times to 1860.

**206. History of American Art - 1860/present (3)** 1860 to the present.

**210. African Art (3)** The art of African peoples or peoples of African descent.

**250. Art History Study Abroad (3-6)** Travel in selected regions outside the United States, and field study of historical and contemporary art and artists, with emphasis on art history.

**301. Women and Art: Prehistory-Middle Ages (3)** History of the image of women in ancient cultures from 30,000 B.C.E. to 1300 C.E. Prerequisites: SEGL 102 or consent of instructor.

**304. Southern Folk Art (3)** Techniques and traditions of Southern folk art concentrating on artists of South Carolina. Prerequisite: SEGL 102.

**306. History of Twentieth Century Art (3)** Survey of western architecture, painting and sculpture. Emphasis is on reading, research and written material. Prerequisites: SATH 106 or SATH 206.

**307. Interpreting Art (3)** A systematic approach to analytical viewing, discussing and writing about art in order to derive pleasure, meaning and value. Popular, utilitarian and historical works of art will be critiqued. Prerequisite: SEGL 102 or consent of instructor.

**350. Art History Study Abroad II (3-6)** Travel in selected regions outside the United States, and advanced field study of historical and contemporary art and artists, with emphasis on art history. Prerequisite: 6 credit hours of art or consent of the instructor.

**398. Selected Topics in Art History (3)** Intensive study of selected topics in art history.

**399. Independent Study (3)** Design and development of research projects of a complex and extensive nature. A student may repeat SATH 399 with a different independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisites: Junior level standing and consent of the instructor.

**499. Art History Internship (3-6)** Supervised work experience in an art history related environment, resulting in a meaningful project/activity for the employing firm and a scholarly project for the student. For three internship credit hours, a minimum of 135 hours of scheduled work, periodic class meetings and consultation with the instructor are required. A contractual agreement signed by the employer, the student, the instructor, the dean of the college is mandatory. Standard grading. A student may repeat SATH 499 with a different internship description for a total of no more than six hours of undergraduate credit. Prerequisites: Junior level standing with 6 hours in art history or consent of the instructor.

### Art Studio (SART)

**103. Fundamentals of Two Dimensional Design (3)** Introduction to visual thinking and principles of two-dimensional design, including line, form, space, texture, color and basic technical skills.

**104. Fundamentals of Three Dimensional Design (3)** Introduction to visual thinking and principles of three-dimensional design, including form, volume and space.

**108. Computer Graphics I (3)** Introduction to the hardware and software used in creating graphic design and illustration.

**110. Drawing I (3)** Introduction to the materials and techniques of drawing, emphasizing visual perception and drawing skills.

**202. Ceramics I (3)** Process of forming, decorating, glazing and firing. Prerequisite: SART 104 or consent of instructor

**203. Color and Composition (3)** Color theory and compositional systems. Prerequisite: SART 103.

**204. Three Dimensional Studies II (3)** Materials and techniques of three dimensional design and sculpture beyond the introductory level. Prerequisite: SART 104.

**205. Digital Art I (3)** Creative approaches to developing fine art projects at the intermediate level using raster and vector computer graphics. Projects emphasize image development, two and three-dimensional design solutions and content. Prerequisites: SART 108 or consent of instructor.

**206. Illustration I (3)** Introduction to illustration with an emphasis on visual problem solving, creativity, effective communication and aesthetics. Visual skills are defined through exploration of various media resulting in appropriate visual solutions for illustration communication. Prerequisite: SART 103, SART 210, or consent of instructor.

**207. Printmaking I (3)** Processes and techniques of printmaking. Prerequisite: SART 103 or consent of instructor.

**210. Drawing II (3)** Materials and techniques of drawing beyond the introductory level. Prerequisite: SART 110 or consent of instructor.

**211. Introduction to Painting (3)** An introduction to the materials and techniques of painting, emphasizing a professional approach to content and expression. Prerequisite: SART 103 or consent of instructor.

**214. Graphic Design I (3)** Creative problem-solving with emphasis on 2-D solutions to conceptual problems; translation of concept into form using word, image and layout; introduction to history of graphic design and typography. Prerequisites: SART 108. Prerequisite or corequisite: SART 110 or consent of the instructor.

**215. Introduction to Metalsmithing (3)** Design and construction of objects in various metals and materials. Prerequisite: SART 104 or consent of instructor.

**228. Business for the Visual Artist (3)** Aspects of business relevant to the visual artist, emphasizing basic accounting and taxes; marketing and promotion; copyrights; sales by artist, gallery, or agent; and contracts. Feedback is received through class discussions and exercises, written examinations, and a final team project. Prerequisites: 6 hours of art history and/or art studio or consent of instructor.

**229. Introduction to Crafts (3)** Traditional craft media: techniques, design and contemporary concepts.

**230. Design and Technology (3)** Introduction for non-majors, to design principles, layout and publication using computer technology and emphasizing practical uses and applications. Prerequisite: SCSC 138 or higher.

**231. Introduction to Life Drawing (3)** Emphasis on visual perception and skills of life drawing from the live model in

a variety of media, using both clothed and unclothed male and female models. Prerequisite: SART 210 or consent of instructor.

**250. Art Study Abroad (3-6)** Travel in selected regions outside the United States, and field study of historical and contemporary art and artists with emphasis on studio techniques.

**255. Art Practicum (1)** Participation in art production and activities, including art gallery and art exhibition preparation and maintenance, exhibition publicity and announcement design and distribution, studio and equipment preparation maintenance and monitoring, art information services including art department and art gallery website design and maintenance. No formal class meetings. Requires 30 contact hours per semester. May be repeated for a total of four credits.

**261. Introduction to Photography (3)** Techniques and procedures of photography, including processing. Prerequisite: SART 103 or consent of instructor.

**302. Ceramics II (3)** Ceramic processes and techniques and technical investigation in clay bodies and glazes with emphasis on the wheel throwing technique. Prerequisite: SART 202 or consent of instructor.

**304. Three Dimensional Studies III (3)** Exploration and application of three-dimensional principles in different sculptural media. Prerequisite: SART 204.

**305. Digital Art II (3)** Creative approaches to developing fine art projects at the advanced level using raster and vector computer graphics. Projects emphasize personal image development, two and three-dimensional design solutions, and content. Prerequisite: SART 205.

**306. Illustration II (3)** Continued exploration of visual communication with an emphasis on concept and professional quality of work. Prerequisite: SART 206 or consent of instructor.

**307. Printmaking II (3)** Intaligo, lithography, block printing, and the execution of original works in these media. Prerequisite: SART 207.

**310. Drawing III (3)** Methods and materials of graphic representation and expression with emphasis on individual creative expression. Prerequisite: SART 210.

**311, 312. Painting II & III (3,3)** Individual problems in representational and non-representational painting with emphasis upon the development of an individual point of view. Prerequisite for 311: SART 211 or consent of instructor. Prerequisite for 312: SART 311.

**314. Graphic Design II (3)** Continuation of translation of concept into form with emphasis on typography, letterforms, typographic syntax and type specification. Prerequisite: SART 214 or consent of instructor.

**315. Graphic Design III (3)** Advanced design problems with emphasis on individual development and exploration of contemporary design issues. Prerequisite: SART 314.

**318. Interface Design I (3)** Introduction to technical and aesthetic concepts and problem solving of interface design including but not limited to web design, CD Rom design, collection and preparation for basic assets (graphics, video, sound). Prerequisite; SART 214 or consent of instructor.

**350. Art Study Abroad II (3-6)** Travel in selected regions outside the United States, and advanced field study of historical and contemporary art and artists, with emphasis on studio techniques. Prerequisite: 6 credit hours of art or consent of the instructor.

**361. Photography II (3)** Technical, historical and aesthetic aspects of photography. Projects allow the development of personal imagery and technique. Prerequisite: SART 261.

**362. Photography III (3)** An historical and critical approach to photography. Several major projects utilize traditional or alternative techniques. Prerequisites: SART 361.

**391. Digital Animation (3)** Digital animation for the graphic design and communications industries. Prerequisite: SART 318.

**398. Special Topics in Art (3)** Intensive study of selected topics in art. Prerequisites: junior level standing with 6 hours in art or consent of the instructor.

**399. Independent Study (1-6)** Opportunities to design and develop projects of a complex and extensive nature in keeping with the student's major creative interests. A student may repeat SART 399 with a different independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisite: Junior level standing and consent of instructor.

**402. Ceramics III (3)** Advanced ceramic processes and techniques and technical investigation in clay bodies and glazes with emphasis on the wheel throwing technique. Prerequisite: SART 302.

**404. Three Dimensional Studies IV (3)** Advanced exploration and application of three dimensional principles in different sculptural media. Prerequisite: SART 304.

**407. Printmaking III (3)** Intaligo, lithography, block printing, and the advanced execution of original works in these media. Prerequisite: SART 307.

**410. Drawing IV (3)** Advanced methods and materials of graphic representation and expression with emphasis on individual creative expression. Prerequisite: SART 310.

**414. Graphic Design IV (3)** Graphic problem solving in the community/business environment; advanced production techniques for the graphic designer. Prerequisite: SART 315.

**418. Interface Design II (3)** Intermediate interface design with emphasis on individual development and exploration of contemporary technical and aesthetic design issues including but not limited to web design, CD Rom design, collection and preparation of basic assets (graphics, video, sound). Prerequisite: SART 318 or consent of instructor.

**471. Printmaking IV (3)** Processes and materials of making fine prints. Prerequisite: SART 407.

**489. Senior Portfolio Development (3)** Revision and finalization of projects, thesis, portfolio/vita preparation. Prerequisites: successful completion of portfolio review and SART 315; Corequisite: SART 414.

**490. Senior Seminar Graphic Design (3)** Preparation of thesis, senior exhibition, portfolio finalization, oral presentation, and explorations of ethical issues. Prerequisite: SART 489.

**499. Art Studio Internship (3-6)** Supervised work experience in an art environment, resulting in a meaningful project/activity for the employing firm and a scholarly project for the student. For three internship credit hours, a minimum of 135 hours of scheduled work, periodic class meetings and consultation with the instructor are required. A contractual agreement signed by the employer, the student, the instructor, the dean of the college is mandatory. Standard grading. A student may repeat SART 499 with a different internship description for a total of no more than six hours of undergraduate credit. Prerequisites: Junior level standing with 6 hours in art or consent of the instructor.

**507. Problems in Art: Studio (3)** Exploration of problems unique to certain media or processes. Prerequisite: consent of instructor or division chair.

### **Astronomy (SAST)**

**111. Descriptive Astronomy (3)** The universe: physical processes and methods of study. (SAST 111L is available for additional credit.)

**111L. Descriptive Astronomy Laboratory (1)** Demonstrations, exercises and night viewings. Three hours per week. Prerequisite or Corequisite: SAST 111.

### **Biology (SBIO)**

**101. Biological Science I (4)** Biological principles underlying cell chemistry, cell biology, classification, plant diversity, plant anatomy, and physiology. Designed for science majors. Three class and three laboratory hours per week

**102. Biological Science II (4)** Biological principles underlying cell origins, genetics, diversity of monera, protista, and animals; mammalian anatomy and physiology. Dissection of preserved specimens is required. Prerequisite: SBIO 101. Designed for science majors. Three class and three laboratory hours per week.

**110. General Biology (4)** Current principles of cell biology, biochemistry, genetics, reproduction, development, and plant and animal diversity, as well as societal concerns. Not for major credit. Three class and three laboratory hours per week.

**201. Introduction to Ecology and Evolutionary Biology (4)** Basic, applied, and theoretical ecology and the foundations of evolutionary biology. Laboratories illustrate lecture concepts and provide experience with fundamental skills of biostatistics, hypothesis testing, and scientific writing. Prerequisites: SBIO 101 and 102 with a "C" or better or consent of instructor. Three class and three laboratory hours per week.

**202. Introduction to Cell and Molecular Biology (4)** Basic principles of the origin, evolution, function and diversity of cells. Emphasis is placed on molecular level approaches to the scientific study of eukaryotic cell function, physiology, metabolism, ultrastructure, and evolution, as well as the use of cells relevant to medical, biosocial, and bioenvironmental issues. Prerequisite: SBIO 201 with "C" or better. Three class and three laboratory hours per week.

**206. Genetics and Society (3)** Fundamentals of genetics, with an emphasis on human genetics; relevance of recent advances and concerns in contemporary society related to genetic technology. Not for major credit.

**232. Human Anatomy (4)** Gross and microscopic structure of the systems of the human body including essential technical terminology. Dissection of preserved specimens is required. Three class and three laboratory hours per week.

**240. Human Biology and Society (3)** Fundamentals of functional human biology; development of a relevant knowledge of medical issues and concerns in contemporary society such as cloning emerging diseases, genetic testing, cancer, emphysema, organ transplants and cardiovascular disease. Not for major credit.

**242. Human Physiology (4)** Functions of systems of the body emphasizing homeostasis, biochemistry and control mechanisms. Three class and three laboratory hours per week. Prerequisite: SBIO 232 or consent of instructor.

**270. Environmental Science (3)** The interrelationship of humans and their environment emphasizing the impact of pollution on human health. Not for major credit. (SBIO 270L is available for additional credit.)

**270L. Environmental Science Laboratory (1)** Laboratory procedures used to monitor air and water quality. Prerequisite or Corequisite: SBIO 270.

**310. Invertebrate Zoology (4)** Phylogenetic and comparative aspects of anatomy, physiology, ecology, reproduction and embryology of the invertebrates. Dissection of preserved specimens is required. Three class and three laboratory hours per week. Prerequisites: SBIO 101 and 102 or consent of instructor.

**315. Comparative Vertebrate Anatomy (4)** Phylogenetic and comparative aspects of structure, development, and evolution. Dissection of preserved specimens is required. Three class and three laboratory hours per week. Prerequisites: SBIO 101 and 102 or consent of instructor.

**320. General Botany (4)** Phylogenetic survey of the morphology, anatomy, and taxonomy of the major plant divisions. Three lecture and three laboratory hours per week. Prerequisites: SBIO 101 and 102 or consent of instructor.

**330. Microbiology (4)** Introduction to bacteria and viruses, emphasizing morphology, pathogenic microbes, antigen-antibody relationships, and antimicrobial agents in chemotherapy. Three class and three laboratory hours per week. Prerequisites: eight hours of biological science or consent of instructor.

**350. Genetics (4)** Basic principles of transmission, molecular and population genetics. Three class and three laboratory hours per week. Prerequisites: SBIO 101 and 102 or consent of instructor.

**370. Pathophysiology (3)** Disruptions of normal physiology, processes that bring about disruptions, and manifestations of disruptions. Prerequisites: SBIO 232, 242 and 330 or consent of instructor.

**375. Evolutionary Biology (4)** Historical development of evolutionary theory; natural and sexual selection; micro- and macroevolution; mass extinctions; current concepts of phylogeny and systematics; human evolution. Laboratories illustrate lecture concepts as well as readings from the primary literature. Three class and three laboratory hours per week. Prerequisite: SBIO 201 or consent of instructor.

**380. Biogeography (4)** The distribution of plant and animal species and the ecological, biological and geographic phenomena controlling such patterning. Labs consist of a series of weekend field trips. Prerequisites: SBIO 101 and 102 or consent of instructor.

**395. Internship in Biological Science (1-3)** Supervised work experience in biological science. A minimum of three hours work per week is required for each credit hour. A contractual agreement signed by the supervisor, the student, the instructor, and the division chair is required. Prerequisite: junior or senior standing. Pass/fail credit.

**398. Topics in Biology (1-3)** Intensive study in selected areas. Individual topics are announced. Prerequisite: consent of instructor.

**399. Independent Study (1-3)** Directed research project. Prerequisite: consent of instructor. Not for major credit.

**507. Developmental Biology (4)** Morphogenetic patterns of embryonic development along with their molecular and cellular bases; and mechanisms of differentiation. Three class and three laboratory hours per week. Prerequisites: SBIO 101 and 102 or consent of instructor.

**525. Plant Taxonomy (4)** The major classes of flowering plants found in South Carolina. Emphasis is placed on economic and horticultural uses. Three class and three laboratory hours per week. Prerequisites: SBIO 101 and 102 or consent of instructor.

**530. Histology (4)** The microscopic anatomy of human cells, tissues and organs. Three class and three laboratory hours per week. Prerequisites: two semesters of biological science and two semesters of chemistry.

**531. Parasitology (4)** Parasites of animals, with emphasis on the immunological, clinical and epidemiological aspects of human parasitism. Dissection of specimens is required. Three class and three laboratory hours per week. Prerequisites: two semesters of biological science and two semesters of chemistry.

**534. Animal Behavior (4)** Identification and classification of behavior patterns exhibited by various species of animals; the development of behavior; proximate and ultimate causes of behavior. Three hours class and three hours laboratory per week. Prerequisites: six credits in basic psychology, or SPSY 101 and SBIO 102.

**535. Neurobiology (4)** Introduction to neuroanatomical-functional relationships. Topics include the anatomical organization of major nuclei and tracts, neurochemical mechanisms, and neural integration of behavior. Three class and three laboratory hours/week. Prerequisites: SBIO 101 & 102 or consent of instructor.

**540. Immunology (4)** Introduction to the molecular and cellular basis of the immune response. Topics include anatomy of the lymphoid system, and innate immune response, lymphocyte biology, antigen-antibody interactions, humoral and cellular effector mechanisms; control of immune responses, and the evolution of immunodefense mechanisms. Prerequisites: SBIO 102 and SCHM 112; and Pre- or Corequisite: SBIO 330 or 340; or consent of instructor. Three class and three laboratory hours per week.

**541, 542. Biochemistry (3,3) (=SCHM 581, 582)** Chemistry and functions of major biological compounds, including primary metabolic pathways and control mechanisms for biosynthesis and degradation. Prerequisite: SCHM 581 or 582.

**543L. Biochemistry Laboratory (1) (=SCHM 583L)** A survey of laboratory methods in biochemistry. Three laboratory hours per week. Prerequisite or corequisite: SCHM 581 or 582.

**550. Cell Biology (4)** Morphology, ultrastructure and biochemistry of living cells; processes of bioenergetics, metabolism, reproduction, expression of genetic information, cellular communication, and cellular laboratory techniques. Three class and three laboratory hours per week. Prerequisites: SBIO 101, 102 and eight hours of chemistry.

**570. Principles of Ecology (4)** Interactions of organisms and the environment; ecosystems structure and functions. Three class and three laboratory hours per week. Prerequisite: SBIO 102.

**599. Senior Seminar (3)** Integration of biological knowledge at an advanced level and exploration of ethical issues. Prerequisites: senior standing, including a minimum of 12 hours of biology at the the 300 level or above, statistics, and speech 201.

### **Business Administration (SBAD)**

**225. Financial Accounting (3)** Principles of external financial reporting for business entities, including income measurement and determination of financial position. Prerequisites: SMTH 120 or 121 or 126.

**226. Managerial Accounting (3)** Attention-directing and problem solving functions of accounting in relation to planning and control, evaluation of performance, and special decisions. Prerequisite: SBAD 225.

**290. Introduction to Business Information Systems (3)** Fundamental information systems concepts and overview of information technology. Topics include: computer hardware, information systems software, telecommunications, Networks database and spreadsheet applications, business applications, and the Internet, Electronic commerce, and the World Wide Web. Prerequisites: SCSC 138 or 141.

**298. Gateways to Business (3)** Nature of business and business skills required for success in the twenty-first century. Business environments in the Upstate are discussed in relation to individual career goals.

*Note: Junior standing (60 semester hours earned) is a prerequisite for all 300 level or above business administration and economics courses. Additional prerequisites are included in individual course descriptions.*

**331. Intermediate Accounting I (3)** Financial accounting theory and practice as they relate to generally accepted accounting principles. Included are external financial reports with emphasis on the balance sheet and the income statement. Prerequisites: Junior standing and SBAD 226.

**332. Intermediate Accounting II (3)** Liability section of the balance sheet relative to generally accepted accounting principles. Included are preparation and analysis of the statement of cash flow, issues of income determination, interperiod tax allocation, and special issues such as pensions and leases. Prerequisites: Junior standing and SBAD 331 with a minimum grade of C.

**333. Cost Accounting (3)** Cost accounting for production management. Cost systems for internal control, standard cost, inventory planning and control, capital budgeting; relationship between cost accounting and other quantitative areas; and other current cost topics are included. Prerequisites: Junior standing and SBAD 226.

**335. Individual Tax Planning (3)** Federal income tax law as it relates to planning individual transactions to minimize income taxes. Includes preparation of individual tax returns. Prerequisites: Junior standing and SBAD 226.

**336. Fund Accounting (3)** Principles and procedures of accounting for the various funds of governmental and institutional organizations and budgetary accounting for planning and controlling revenues and expenditures. Prerequisites: Junior standing and SBAD 225.

**347. Legal Environment of Business (3)** Legal system; crimes and torts; consumer law, anti-trust, labor and employment law; environment and insurance; contracts and agency; business ethics; and international matters. Prerequisite: Junior standing.

**348. Issues in Commercial Law (3)** Corporations, bankruptcy, and the Uniform Commercial Code. Prerequisites: Junior standing and SBAD 347.

**350. Principles of Marketing (3)** Exchange relationships between buyers and sellers in a dynamic global marketplace. Focus areas include: environmental analysis, marketing research, buyer behavior, marketing strategy, business ethics, and the societal impacts of marketing activity of integrated marketing organizations. Prerequisite: Junior standing.

**351. Consumer Behavior (3)** Consumer decision-making processes in a dynamic global marketplace. Selected concepts from psychology, sociology, economics, anthropology, and other behavioral disciplines are examined to develop a managerial perspective on predicting and interpreting consumer responses to marketing strategies. Prerequisites: Junior standing and SBAD 350.

**352. Marketing Communications (3)** Selection and implementation of promotional strategies in a dynamic global marketplace. Focus areas include: integrated marketing communication processes, psychological, sociological and cultural factors influencing promotion decision making. Prerequisites: Junior standing and SBAD 350.

**353. Marketing Channels (3)** Integration of business objectives with specific institutional characteristics to

demonstrate marketing channel management as fundamental to success of the business enterprise. Research and the use of models in selected areas of channel management are emphasized. Prerequisites: Junior standing and SBAD 350.

**363. Business Finance (3)** Procurement and management of wealth by privately owned profit-seeking enterprises. Prerequisites: Junior standing, SBAD 225 and SECO 291.

**364. Financial Institutions and Markets (3)** Financial institutions and money and capital markets with consideration of their roles in the intermediation process. Emphasis is on the goals of these institutions and how they accomplish these goals within regulatory and tax constraints in highly competitive markets. Prerequisite: Junior standing.

**365. Principles of Investments (3)** The conceptual and analytical framework for formulating investment policies. An overview of the traditional securities markets for stocks, bonds, options, and non-traditional investment such as financial futures, commodities, and international markets is emphasized. Prerequisite: Junior standing.

**366. Principles of Real Estate (3)** Principles of property utilization, the law dealing with ownership, titles and liens; determinants of value; the real estate cycle; regulatory legislation; current problems in urban and suburban land use; city structure and planning. Prerequisite: Junior standing.

**369. Personal Finance (3)** Life insurance, health insurance, wills, trusts, social security, stocks, bonds, real estate, mutual funds, and other uses of funds. Prerequisite: Junior standing.

**371. Organizational Management and Behavior (3)** Survey of functions of management and forms of organizational behavior demonstrated in all types of organizations, with a focus on quality, competitiveness and the global environment, and a heavy emphasis on managing workforce diversity. Prerequisite: Junior standing.

**372. Operations Management (3)** Managing the direct resources required to provide an organization's goods and services. There is a strong emphasis on quantitative decision making tools and techniques. Topics include process selection, quality tools, and inventory. Prerequisites: Junior standing, SECO 291 and SMTH 121 or equivalent.

**374. Management of Human Resources (3)** A line and staff function utilizing modern-day concepts and practices. Topics include: employment, training, employee services, compensation, industrial relations, and legal constraints. Prerequisite: Junior standing.

**377. Advanced Organizational Behavior (3)** The study of the impact of individuals, groups and structure on behavior in a business organization in order to improve organiza-

tional performance. Prerequisites: Junior standing, and SBAD 371.

**378. The International Business Enterprise (3)** The multinational firm: its development, organization, management, differentiation from domestically oriented firms, and its future. Prerequisites: Junior standing and SBAD 371. A foreign language course is strongly recommended.

**390. Business Information Systems (3)** Development, use, and management of business information systems. Topics include: information systems for business operations; management information and decision support systems; information systems development; enterprise and global management of information technology; and the security and ethical challenges of information technology. Prerequisites: Junior standing, SBAD 290 or SCSC 241 or SIMS 201.

**398. Topics in Business (3)** Intensive study in a contemporary area of business. Topics are selected to meet current faculty and student interest. Prerequisite: Junior standing.

**399. Independent Study (1-6).** Prerequisite: Junior standing.

**420. Strategic Issues in the Management of Technology (3)** Explores the technology-strategic management interface. Emphasis will be placed on the integration of technological and business strategies, new project development, and managing technological change in global firms and markets. Prerequisite: Senior standing.

**432. Advanced Federal Income Tax (3)** Estates and trusts, partnerships, corporations, foreign income, gift, and social security taxes. Prerequisite: SBAD 335. *Spring.*

**433. Accounting Control Systems (3)** Skills, tools and procedures needed to evaluate EDP controls. Program, system and business level controls are presented to show how the accounting, ethical and legal considerations should be integrated into the design of business accounting and auditing systems. Prerequisites: (SBAD 331 or SBAD 333) and (SBAD 290 or SIMS 201).

**435. Auditing (3)** Effectiveness of internal control systems, ethics, legal liability, the auditing of information processing systems, the audit application of statistical sampling, and the reporting function of the independent auditor are examined. Prerequisites: SECO 292, SBAD 332; Prerequisite or Corequisite: SBAD 433.

**437. Advanced Accounting (3)** Accounting for business combinations, consolidated financial statements, governmental entities, and not-for-profit organizations. Prerequisites: SBAD 332.

**452. International Marketing (3)** Selection of markets and the development of marketing strategy in a dynamic global marketplace. The influences of different demographic,



political, legal, cultural, competitive economic, technological, and natural environments are highlighted in order to conduct business across political borders. Prerequisites: SBAD 350.

**456. Business Marketing (3)** Industrial, governmental, and non-for-profit sector markets as distinguished from personal household consumption. The methods used by marketers to create marketing strategies throughout an integrated supply-chain in a dynamic global marketplace. Prerequisites: SBAD 350.

**457. Marketing Research (3)** Research methods and procedures used in the marketing process. Particular emphasis is given to the sources of market data, sampling, preparation of questionnaires, collection and interpretation of data and the relation of market research to the policies and functions of the business enterprise. Emphasis is placed upon differences in life-style, beliefs and attitudes, and their influences upon the marketing decisions of the firm. Prerequisites: SBAD 350 and SECO 291 or equivalent.

**458. Marketing Management (3)** Strategic marketing decision-making in integrated organizations competing in the dynamic global marketplace. Focus areas include: the policy areas of an organization, marketing research, marketing strategy, buyer behavior, forecasting, cost and profit analysis, and total quality management. Prerequisite: Senior standing and SBAD 350.

**459. Personal Selling and Sales Management (3)** Development of personal selling skills and management of sales function. Focus areas include: preparation, prospecting, interviewing, trial closes, handling objections, closing after-sales support, recruitment, selection, motivation, training, and development, compensation, supervision, and other managerial topics. Prerequisites: SBAD 350.

**467. Real Estate Finance (3)** Instruments utilized in the financing of real property, including mortgages, junior liens, land contracts, long-term leasing and sale, and leaseback arrangements. Included are sources of funds for real estate financing as well as programs of agencies of the U.S. Government. Prerequisite: Junior standing.

**468. Real Estate Appraisal and Investment Management (3)** Relationship between valuations and market prices; local real estate taxes as a charge against income-producing property; value from an income point of view; valuation of leaseholds; problems in eminent domain; principles of investment as they apply to real estate and the management of real estate portfolios. Prerequisite: Junior standing.

**471. New Business Enterprise (3)** Analysis of business opportunities; planning and establishing a business organization to exploit an opportunity; management of a small business. Prerequisite: SBAD 371.

**474. Advanced Operations Management I (3)** Theory and applications of contemporary methods of managing operations. Topics include supply chain management, forecasting, master planning. Prerequisite: SBAD 372.

**475. Advanced Operations Management II (3)** Theory and applications of contemporary methods of managing operations. Topics focus on competitive strategies. Prerequisite: SBAD 372.

**476. Statistical Process Control (3)** Basic statistical process control and process capability improvement procedures in the framework of the Deming management philosophy. Prerequisites: Junior standing, SECO 292 or equivalent.

**477. Organization Theory (3)** Exploration of advanced concepts in the study of organizational processes and structure. Prerequisite: SBAD 371.

**478. Business Policy (3)** Multifunctional approach to the study of organizational problems and opportunities. Knowledge gained in previous courses is applied to the functions of an organization through use of strategies, objectives, policies, technology, environment, systems, ethics, and decision making. Requirements include individual research accompanied by written and oral presentations. Prerequisites: Senior standing and all SBAD and SECO core courses.

**499. Business Internship (3-6)** Supervised work experience in the business environment resulting in a meaningful product for the employing firm and a scholarly project for the student. A minimum of nine hours per week of scheduled work, periodic class meetings, and individual consultation with the instructor is required. A contractual agreement signed by the employer, the student, the instructor, and the dean is mandatory. Prerequisite: Junior standing—A student must have earned a minimum of 36 credit hours in business and economics courses and have an overall GPA of 2.5 or higher or a 2.5 GPA on twelve or more hours for the previous semester. Pass/fail credit.

**561. International Business Finance (3)** Financial management of a multinational business enterprise. Topics include subsidiary working capital management, financial analysis of overseas ventures, sources of international capital, funds remittance policies, trade finance, exchange risk management policies, and techniques of financial control. Prerequisite: SBAD 363.

## Chemistry (SCHM)

*Note: Occupational Safety and Health Administration (OSHA) regulations require that everyone who enters chemistry laboratories wear safety goggles.*

**101. Fundamental Chemistry I (4)** Survey of inorganic and solution chemistry. Non-science majors only. Three class, one recitation, and two laboratory hours per week.

**102. Fundamental Chemistry II (4)** Survey of organic and biochemistry. Non-science majors only. Three class, one recitation, and two laboratory hours per week. Prerequisite: SCHM 101 or 111.

**105, 106. Chemistry and Society I and II (3,3)** Survey of chemistry and its impact on technology, the environment, modern life, and thought. Need not be taken in sequence. Non-science majors only. (SCHM 107 laboratory is available for additional credit.)

**107L. Chemistry and Society Laboratory (1)** Three laboratory hours per week. Prerequisite or corequisite: SCHM 105 or 106. (Credit may be earned only once.)

**109. Chemistry of Living Things (4)** Chemical principles including structure of and energy associated with matter, patterns of chemical and physical changes, kinetics, and equilibrium. Survey of organic chemistry and the structure and function of biologically derived macromolecules are emphasized. Not for major credit. Three lecture, one recitation, and two laboratory hours per week.

**111. General Chemistry (4)** Chemical principles with emphasis on stoichiometry, atomic structure, bonding, and molecular structure. Three class, one recitation, and two laboratory hours per week. Prerequisite or corequisite: SMTH 121 or higher, except statistics or consent of instructor.

**112. General Chemistry and Qualitative Analysis (4)** Chemical equilibrium, acids and bases, oxidation-reduction, and inorganic qualitative analysis. Three class, one recitation, and three laboratory hours per week. Prerequisites: SCHM 111.

**321. Quantitative Analysis (3)** Principles of gravimetric, volumetric, and basic instrumental methods of analysis. Three class hours per week. Prerequisite: SCHM 112.

**321L. Quantitative Analysis Laboratory (1)** Practice of volumetric, gravimetric, and simple instrumental methods of analysis. Three laboratory hours per week. Corequisite: SCHM 321.

**331, 332. Organic Chemistry (3,3)** Nomenclature, reactions, and syntheses of carbon compounds with emphasis on reaction mechanisms. Three class hours and one recitation hour per week. Prerequisite for 331: SCHM 112 or consent of instructor. Prerequisite or corequisite for 332: SCHM 331.

**331L, 332L. Organic Chemistry Laboratory (1,1)** A survey of laboratory methods of organic chemistry. Three laboratory hours per week. Prerequisite or corequisite for 331L: SCHM 331. Prerequisites for 332L: SCHM 331L and SCHM 332 or concurrent enrollment in SCHM 332.

**395. Internship in Chemistry (1-3)** Supervised work experience in chemistry. A minimum of three hours per week is

required for each credit hour. A required contractual agreement is signed by the supervisor, the student, the instructor, and division chair. Prerequisite: junior or senior standing. Pass/fail credit.

**397. Junior Seminar (1)** Searching and reading chemical literature and presentation of papers in a journal club format. Class meets with the chemistry Senior Seminar (SCHM 599) and presentations by SCHM 599 students will be observed. Prerequisite: SCHM 331, 331L. Corequisite: SCHM 321, 332, 332L.

**499. Undergraduate Research (1-3)** Directed research project introducing the student to the methods of chemical research. A written report on work accomplished is required at the end of each semester. Research involves laboratory and/or library work as determined by the instructor. The student can sign up for 1-3 hours of research each semester with a maximum of 9 hours total credits for undergraduate research. (Not for major credit). Prerequisite: consent of instructor.

**511. Inorganic Chemistry (3)** Atomic structure, molecular orbital theory, coordination, compounds, redox chemistry, crystal structures, and a systematic study of the periodic table. Prerequisites: SCHM 321 and SCHM 331.

**512L. Inorganic Chemistry Laboratory (1)** Syntheses with high pressure reactions, the use of unfamiliar solvents, high temperature and inert atmosphere, and the application of infrared, ultraviolet, nuclear magnetic resonance, and mass spectroscopy to inorganic chemistry. Three laboratory hours per week. Prerequisite: SCHM 331L. Prerequisite or corequisite: SCHM 511.

**522. Instrumental Methods of Analysis (4)** Theory, instrumentation, and applications of modern instrumental techniques. Three class and three laboratory hours per week. Prerequisite: SCHM 321.

**530. Spectrometric Identification of Organic Compounds (3)** Development and application of methods of obtaining and interpreting spectrometric data in terms of structural organic chemistry. Topics include infrared, ultraviolet, visible, and nuclear magnetic resonance spectroscopy. Prerequisite: SCHM 332 or consent of instructor.

**541. Physical Chemistry I (3)** Macroscopic systems including thermodynamics and chemical equilibrium. Prerequisites: SCHM 321 and SPSH 202. Coregistration in SPSH 212 is an alternative to having completed SPSH 202. Prerequisite or corequisite: SMTH 244.

**541L. Physical Chemistry I Laboratory (1)** Applications of physical chemical techniques to thermodynamics, chemical equilibrium and chemical kinetics. Three laboratory hours per week. Prerequisite: SCHM 321L. Corequisite: SCHM 541.

**542. Physical Chemistry II (3)** Microscopic systems including quantum theory and its applications to electronic structure and spectroscopy. Prerequisite: SCHM 541.

**542L. Physical Chemistry II Laboratory (1)** Applications of physical chemical techniques to quantum mechanics and spectroscopy. Three laboratory hours per week. Prerequisite: SCHM 541L. Corequisite: SCHM 542.

**561. Industrial Chemistry (3)** Processes and techniques in the inorganic, organic, and polymer chemical industries. Prerequisite: SCHM 542 or consent of instructor.

**581, 582. Biochemistry (3,3) (=SBIO 541, 542)** Chemistry and functions of major biological compounds, including primary metabolic pathways and control mechanisms for biosynthesis and degradation. Prerequisite: SCHM 332 or consent of instructor.

**583L. Biochemistry Laboratory (1) (=SBIO 543L)** A survey of laboratory methods in biochemistry. Three laboratory hours per week. Prerequisite or corequisite: SCHM 581 or 582.

**599. Senior Seminar (3)** Integration and assessment of chemical knowledge at an advanced level, exploration of ethical issues, research, and oral presentation. Prerequisites: SSPH 201, SCHM 321, SCHM 332, SCHM 541 and one course from SCHM 511, 522, 530, 561, 581, 582.

### Communication (SCOM)

**375. Communication Research Methods (3)** Fundamentals of communications research methods and applications. Topics include survey research, observational and experimental studies, primary research data-gathering techniques, secondary research sources, data analysis, message, market, competitive and audience research measures. Prerequisites: SJOU 301 and SSPH 301; or consent of the instructor.

**399. Internship or Independent Study in Mass Communication (1-3)** Supervised professional experience of research outside of the classroom. For three internship credit hours, a student is to work 135 hours with an approved agency; for two credit hours, 90 hours, for one credit, 45 hours. For an internship or for an independent study, a contract must be signed by the student and by the instructor of record and other designated faculty and administrators. A student may repeat SCOM 399 once with a difference internship or independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisites: SJOU 301, GPA 2.0 overall, 2.5 in major and consent of faculty supervisor.

**490. Senior Seminar (3)** Reading and research on selected topics in journalism, speech, and theatre designed to integrate knowledge, to explore ethical issues, and to gain experience in research and oral presentation. Prerequisite: SSPH201.

### Computer Science (SCSC)

**138. Introduction to Computer Technology (3)** Introduction to graphical user interface, word processing, spreadsheet, database, Internet, cross-platform training, computer components and peripherals, input/output concepts, storage concepts, and computer buyer's guide considerations.

**139. Visual BASIC Programming I (3)** Visual user interface design, event-driven programming using controls, variables, constants, calculations, decision structures, loop control structures, arrays, creating menus. Prerequisites: SCSC 138 or SBAD 290 or consent of instructor. **Not** for Computer Science major credit.

**200. Computer Science I (3)** Design, analysis and testing of algorithms and classes, including programming from an Object-Oriented perspective, simple data types, control structures, arrays, file I/O, and complexity analysis. Prerequisite or Corequisite: SMTH 174 or consent of the instructor.

**210. Computer Organization (3)** Computer organization, logic gates and expressions, circuits, CPU, memory, numbering systems, assembly language programming, instruction formats, and addressing modes. Prerequisite: C or better in SCSC 200 or consent of instructor.

**232. COBOL Programming (3)** Basic and advanced programming with emphasis on commercial applications. Prerequisite: C or better in SCSC 200 or consent of instructor.

**234. Visual BASIC Programming (3)** Basic and advanced programming in the Visual BASIC language including visual object design, active-X objects, access to database objects, dynamic data exchange, object linking and embedding. Prerequisite: C or better in SCSC 200 or consent of instructor.

**237. Ada Programming (3)** Basic and advanced programming with problem solving utilizing structured variables, arrays, strings, linked lists, queues and trees. Prerequisite: C or better in SCSC 200 or consent of instructor.

**238. C++ Programming (3)** Introduction to C++ as a second object-oriented language with concepts of OO programming, data abstraction, polymorphism, inheritance, graphical user interface design with MFC, and memory management issues. Prerequisite: C or better in SCSC 200 or consent of instructor.

**239. Visual BASIC Programming II for Non-Majors (3)** Modular programming, algorithmic design, string manipulation, array processing, sequential and random file processing in the BASIC language. **Not** for Computer Science major credit. Prerequisites: SCSC 139 or consent of instructor.

**241. Advanced Algorithm Design (3)** Problem solving and algorithmic design in a procedural language including strings, arrays, record structures, recursion, random number generation, sorting, and searching. Rigorous techniques in the design, coding, testing, and documentation of computer algorithms are emphasized including algorithm efficiency and programming style. Data abstraction is introduced. Prerequisite: SCSC 141 or consent of the instructor.

**242. Elementary Data Structures (3)** File input-output, objects and classes, pointers and dynamic storage allocation, linked lists, stacks, introductory binary trees, and introductory hashing methods. Prerequisite: SCSC 241 or consent of instructor.

**300. Computer Science II (3)** Advanced design, analysis and testing of algorithms and classes, including inheritance, polymorphism, UML, complexity analysis, recursion, search and sorting techniques, linked lists, stacks and queues. Prerequisite: C or better in SCSC 200 or consent of instructor.

**310. Introduction to Computer Architecture (3)** Computer organization and architecture, basic processor design, hard wired and microprogrammed control, ALU, memory organization, data paths, pipelining, and interfacing and communications. Prerequisite: C or better in SCSC 210 or consent of instructor.

**311. Information Systems Hardware and Software (3)** An introduction to computer and systems architecture and operating systems for system development personnel. Topics include CPU architecture, instructions sets, memory, registers, input/output, and operating system modules such as process management, memory and file management. Prerequisite: C or better in SCSC 200 or consent of instructor.

**314. Introduction to Robotics (3)** Fundamental concepts of industrial robotics including kinematics, 3D coordinate transformation, robot motion, robot control and sensing, robot programming, and computer vision. A review of new technologies for computer-integrated manufacturing, computer-aided design and computer-aided manufacturing, automated material handling, and flexible manufacturing systems is included. Students are required to write programs in order to demonstrate the laboratory projects. Prerequisites: C or better in SCSC 200 and SMTH 127, or consent of instructor.

**321. Computer Science III (3)** Design, analysis and testing of advanced data structures, including priority queues, trees, binary search trees, tree traversals and balancing techniques, hashing, and graph theory. Prerequisites: C or better in SCSC 300 or consent of instructor.

**399. Independent Study (1-9) As needed.**

**401. Introduction to Systems Simulation (3)** Simulation languages, techniques, and methodology as applied to research problems from science and computer systems.

Design of simulation experiments for optimizations and applications is included. Prerequisites: C or better in SCSC 310, 321 and SMTH 144; or consent of instructor.

**412. Computer Networks I (3)** Introduce the basic concepts needed to design, implement, and manage networks. Transmission media, topologies, local area and wide area network technologies, communication protocols, standards, network architectures, security, and network operating systems are examined. Prerequisite: C or better in SCSC 300, or consent of instructor.

**416. Parallel Computing (3)** Fundamental concepts of parallel computing (parallel architectures, memory, inter-connection topologies, compilers, operating systems and input-output constraints), design and analysis of parallel algorithms (performance measures and complexities); and principles of parallel programming languages (level of parallelism, message passing and shared-address space parallelism, mapping and granularity). Prerequisites: C or better in SCSC 310 and SCSC 321, or consent of instructor.

**420. File Management (3)** Detailed analysis of secondary storage devices and their effects on the way large file systems are organized, accessed and maintained. Topics include effective buffer management, blocking, external sorting, random access files, indexed-sequential files and collision-resolution methods with emphases on the external tree structures that support access to these type files. Prerequisite: SCSC 321 or consent of instructor.

**421. Design and Analysis of Algorithms (3)** Concepts and fundamental strategies of algorithm design; the analysis of computing time and memory requirements; the theory of computational complexity (NP-hard and NP-complete); graph manipulation algorithms (connected components, minimum spanning trees, traveling salesman, cycles in a graph, and coloring of graphs); search algorithms (depth-first, breadth-first, best-first, and alpha-beta minimax); and computational algorithms (matrix multiplication, systems of linear equations, expression evaluation, and sorting). Prerequisite: C or better in SCSC 321 or consent of instructor.

**440. Object Oriented Systems Analysis and Design (3)** Analysis and design of information systems using object oriented methodologies. Emphasis is on effective communication and integration with users and user systems, interpersonal skill development with clients, users, team members, and others associated with development, operation, and maintenance of the system, use of modeling tools, adherence to methodological life-cycle and project management standards. Prerequisite: C or better in SCSC 321 or consent of instructor.

**441. Experiential Learning in Computer Science (3)** Experience in a business, educational, or non-profit computing environment. May not be used for major credit in any major in computer science. Prerequisite: approval of the instructor. Pass/fail credit.

**450. E-Business Web Application Development (3)** A project-oriented course involving the complete application development of an online commercial Website. Basic Webpage design, including HTML and Style Sheets is covered, but the focus is on what happens behind the scenes of a business Website, including client versus server-side information processing, CGI and Event-Driven programming, data transmission, storage and compressions, risk analysis, and security issues. Prerequisite: C or better in SCSC 300 or consent of instructor.

**455. Computer Security (3)** A survey of the fundamentals of information security, including risks and vulnerabilities, policy formation, controls and protection methods, database security, encryption, authentication technologies, host-based and network-based security issues, personnel and physical security issues, issues of law and privacy. Prerequisite: C or better in SCSC 300 or consent of instructor.

**499. Directed Research (3)** An investigation of technical papers from the instructor's area of research. The composition and presentation of technical papers that either survey the existing literature or make an original contribution to the research area is required. Prerequisites: C or better in SCSC 300 or consent of instructor.

**509. Topics in Computer Science (3)** Selected topics of special interest in computer science. May be repeated for credit. Prerequisite: consent of instructor.

**511. Operating Systems (3)** Introduces the fundamentals of operating systems design and implementation, including an overview of the components of an operating system, mutual exclusion and synchronization, I/O, interrupts, implementation of processes, scheduling algorithms, memory management, and file systems. Prerequisites: C or better in SCSC 210 and SCSC 321 or consent of instructor.

**512. Computer Networks II (3)** Advanced topics in telecommunications, location positioning systems and computer networking, including wireless and mobile computing, integration of wireless and wired networks, design issues, packet transmission, datagram encapsulation and fragmentation, media access control, data transmission and retransmission, routing, bridging, switching, addressing error handling, flow control, data security, and local and wide-area networks. Prerequisites: C or better in SCSC 412 or consent of instructor.

**516. Distributed and Network Programming (3)** Design and implementation of distributed application and network communication programs, including network application development with UCP and TCP/IP protocols, introduction to distributed systems and computing, RIM, socket programming, client/server models, and communication primitives, such as datagrams, packet retransmission, routing, addressing, error handling, and flow control. Prerequisite: C or better in SCSC 321 or consent of the instructor.

**520. Database System Design (3)** Database Management System (DBMS) architecture and organization, design and implementation of DBMS, data models, internal databases structures, conceptual modeling, data independence, data definition language, data manipulation language, normalization, transaction processing, recovery, and security. Prerequisite: C or better in SCSC 321 or consent of instructor.

**521. Database Implementation and Application Development (3)** Design and implementation of database and client/application applications, in-depth treatments of embedded queries and stored procedures, database triggers, database extended languages, handling of data collection and large data objects, transaction processing, performance tuning, and architectures and design patterns of distributed applications. Prerequisite: C or better in SCSC 520 or consent of instructor.

**525. Knowledge Discovery and Data Mining (3)** Extraction and discovery of knowledge from large databases, data integration and data warehousing, data mining algorithms, models, and applications including association rule mining information retrieve (IR) and mining of text databases, decision tree, decision rules, classification techniques, cluster analysis, and evaluation, visualization, and interpretation of patterns. Prerequisite: C or better in SCSC 520 or consent of instructor.

**530. Programming Language Structures (3)** Paradigms and fundamental concepts of programming languages, such as scope, binding, abstraction, encapsulation, typing, and language syntax and semantics. Functional and logic programming paradigms are also introduced through sample programming languages. Prerequisites: C or better in SCSC 210 and SCSC 321 or consent of instructor.

**531. Introduction to Compiler Construction (3)** Concepts, design, implementation and construction techniques for programming language translator; simple one-pass compiler; lexical analysis (token specification and recognition); syntax and semantics analysis (context-free grammars, top-down, bottom-up and operator precedence parsing, LL- and LR-parser techniques, treating ambiguous grammars, and error recovery). Prerequisite: C or better in SCSC 530 or consent of instructor.

**540. Software Engineering (3)** Methods and tools of software engineering, software life cycle, specification and design of software, software testing, cost and effort estimation, project management, risk analysis, and documentation. A relatively large software system is developed in a team environment. Prerequisite: C or better in SCSC 321 or consent of instructor.

**560. Numerical Analysis (3) (=SMTH 560)** Difference calculus, direct and interactive techniques for matrix inversion, eigenvalue problems, numerical solutions of initial value problems in ordinary differential equations, stability, error analysis, and laboratory applications. Prerequisites: SMTH 245 and 344, and programming competency.

**580. Introduction to Artificial Intelligence (3)** Intelligent agents, expert systems, heuristic searching, knowledge representation and reasoning, artificial neural networks, ontologies, and natural language processing. Prerequisite: C or better in SCSC 321 or consent of instructor.

**585. Introduction to Computer Vision (3)** Processing and analyzing features in still digital images, camera calibration, stereopsis, object recognition, the processing of edges, regions, shading and texture, and introductory video processing techniques. Prerequisites: C or better in SCSC 321 and SMTH 143 or consent of instructor.

**599. Computer Science Senior Seminar (3)** Integration of knowledge at an advanced level, a review of recent developments in theoretical and applied computer science, the exploration of ethical issues, along with research and oral presentation. Prerequisites: 12 hours of 300 level or above computer science courses and consent of instructor.

### **Criminal Justice (SCRJ)**

*Note: Criminal Justice 101 or Sociology 101 is a prerequisite to all other criminal justice courses.*

**101. Introduction to Criminal Justice (3)** Survey of the law enforcement, judicial, correctional, and juvenile systems; interrelationships between criminal justice agencies and the community.

**300. Criminal Trial Practice (3)** The criminal trial, including the rules of evidence, trial strategy, opening statements, the presentation of evidence, arguing objections, closing arguments, and a critical analysis of the entire process. Prerequisites: SCRJ 101, SSOC 101, SGIS 201, or consent of instructor.

**310. Policing in America (3)** Police organizations; the recruitment, training, and socialization of police officers; the role of police in society; and some critical issues in policing. The problem of coercive power as it relates to policing is also examined.

**320. The Criminal Courts (3)** The administration of criminal justice in the American federal and state court systems. The nature and concept of justice, court personnel, functions, jurisdictions, policies, procedures, discretion, and current developments in court technology and organization will be reviewed.

**321. Criminal Law (3)** Origin and development of criminal law in America along with basic elements of crime and defenses.

**330. Institutional Corrections (3)** History of corrections; traditional and contemporary philosophies, practices and procedures; constitutional limitations and the impact of law on correctional practices.

**333. Community-Based Corrections (3)** Development and impact of community programs, halfway houses, group homes, work-release, and educational release programs,

including the role of the community and citizens in the correctional process.

**340. Criminal Justice Research Methods (3)** Quantitative, qualitative and comparative methods used in criminal justice research, focusing on research design, data collection and analysis, and ethical issues.

**341. Theories of Crime (3)** An examination of crime and criminal behavior. Includes analyses and critical assessments of traditional and contemporary theories of crime.

**342. Crime in America (3)** Manifestations of crime, its victims, societal control strategies, correlates, and the collection and use of criminal statistics.

**351. Juvenile Delinquency (3) (=SSOC 355)** Social factors in the development, identification and treatments of delinquents and juvenile delinquency in the context of juvenile justice systems.

**360. Alcohol, Drugs, and Public Policy (3)** History and theories of alcohol and other drug use, types and effects of drugs, crime associated with drugs, prevention and treatment of abuse, and efforts to control and regulate drug use. Both past and present public policies for the control of licit and illicit drugs will be evaluated.

**364. State and Local Government (3) (=SGIS 364)** The institutions, functions, policy making processes, and politics of state and local governments including an examination of the relations between state and local government and the relations between state and local government and the national government.

**370. Introduction to Public Administration (3) (=SGIS 370)** The basic principles and theory of administrative structure, responsibility, and control in relation to policy making in the modern state.

**375. Victimology (3)** Forms of victimization, the role of victims in crimes, their treatment by the criminal justice system, their decisions to report crimes and help prosecute offenders, victim-offender mediation, and victim compensation. The national crime survey regarding patterns and trends in victimization will be introduced.

**376. Women and Crime (3)** The traditional and contemporary explanations of female delinquency and criminality, the differential treatment accorded female defendants and victims, the nature of crime against women, the quality of state and federal correctional systems for women, and the status of females as criminal justice professionals.

**380. Minorities, Crime, and Criminal Justice (3)** The involvement of minorities in crime and in the criminal justice system: theory, social policy, and effects.

**391. Criminal Justice Field Study (3)** History, jurisdiction, and departmental interaction between various law enforcement, correctional, legislative, and judicial agencies, involving travel to a major metropolitan city. Course may be taken twice if the city is different.

**399. Independent Study (3)** May be repeated once with the consent of the adviser.

**423. Social Deviance (3) (=SSOC 351)** Theories, methods, and substantive issues in the creation, involvement, recognition, and control of deviance. Sociological theories and pertinent research data are integrated in the context of contemporary societal issues.

**451. Civil Rights and Civil Liberties (3) (=SGIS 451)** Freedom of religion, freedom of speech and association, due process, equal protection, and criminal procedure. Prerequisite: SGIS 201.

**452. The Judicial Process (3) (=SGIS 452)** The growth of law, the lawmaking of the courts, the structure and organization of federal and state courts, the procedures involved in civil and criminal cases, and the problems and proposals for reform in the administration of justice.

**461. Pre-Trial Criminal Procedure (3)** Operation of the criminal justice handling of the criminal suspect from the moment an individual is approached by the police for questioning/investigation, search and/or seizure, to the point where the accused enters the adversarial system. Prerequisite: SCRJ 101 or consent of the instructor.

**462. Post Arrest Criminal Procedure (3)** Criminal procedure from the beginning of the adversarial system through sentencing. Prerequisite: SCRJ 101 or consent of instructor.

**470. Criminal Justice Management and Organization (3)** Problems, processes, and theories of communication, decision making, and control in criminal justice agencies.

**471. Comparative Criminal Justice Systems (3)** Analysis of international criminal justice systems, its legal foundations, current structures, and strategies of crime control. Prerequisite: senior standing or consent of instructor.

**472. Policing: Theories and Programs (3)** The development of police organizational theories, practices and methods from the turn of the twentieth century to the twenty-first century. Major emphasis is on development and implementation of new programs and application to urban policing. Prerequisite: SCRJ 310 or consent of instructor.

**491. Selected Current Topics (3)** A seminar for advanced students. May be repeated once with the consent of the adviser. Prerequisite: consent of instructor.

**495. Senior Seminar (3)** Exploration, at an advanced level, of issues, topics and dilemmas related to crime and the criminal justice system. The specific topics covered vary depending upon the instructor. Prerequisites: One statistics course, SCRJ 340, SCRJ 341; or consent of instructor.

**499. Criminal Justice Internship (3)** A planned program of observation, study and work in selected criminal justice and related agencies. The purpose is to broaden the educational experience of seniors by giving them an opportunity to work with practitioners in the field. Prerequisites: minimum GPA of 2.5, criminal justice major, senior standing, and consent of instructor.

### **Economics (SECO)**

**221. Principles of Macroeconomics (3)** Causes and effects of changes in economic aggregates, including gross domestic product, personal income, unemployment, and inflation. The role of economics in contemporary society and the effect of monetary and fiscal policy on the functioning of a free market system are explored. Prerequisite: SMTH 120 or 121 or 126.

**222. Principles of Microeconomics (3)** Consumer demand, supply, and price in a free-market system. The economics of the firm is presented within the context of different market structures. Prerequisite: SMTH 120 or 121 or 126.

**291. Probability and Statistics (3)** Concepts of probability, probability distributions, and sampling theory. Prerequisite: SMTH 121.

**292. Statistical Inference (3)** Methods of statistical inference, including additional topics in hypothesis testing, linear statistical models, and time series analysis. Prerequisite: SMTH 122 and SECO 291.

*Note: Junior standing (60 semester hours earned) is a prerequisite for all 300 level or above business administration and economics courses. Additional prerequisites are included in individual course descriptions.*

**301. Commercial and Central Banking (3)** History, structure, functions and operations of the American commercial and central banking system. Emphasis is placed on the influence and operations of the Federal Reserve System. Prerequisites: Junior standing and SECO 221.

**311. Issues in Economics (3)** Nature and causes of major economic problems facing the nation and its communities and policy alternatives designed to solve them, including the philosophy and methodology of economics in social problem solving. Prerequisites: Junior standing, SECO 221 and 222.

**321. Intermediate Microeconomic Theory (3)** The operation of the price system and its role in understanding the behavior of individual economic units, specifically consumers, producers, and suppliers of resources. Prerequisites: Junior standing and SECO 222.

**322. Intermediate Macroeconomic Theory (3)** Classical, Keynesian, and post-Keynesian models. These models provide a framework for monetary and fiscal policy pre-

scriptions to economic problems. Prerequisites: Junior standing and SECO 221.

**462. Public Finance Theory (3)** Theory and practice of government spending and taxation. Prerequisites: Junior standing, SECO 221 and 222.

**499. Topics in Economics (3)** Selected topics in economics. Topics vary depending on available staff and interests of students. This course may be repeated for credit. Prerequisites: Junior standing, SECO 221 and 222.

**503. International Economics (3)** Theory of international specialization and exchange, impact of international transactions on national income, and introduction to the network, composition and sources of world trade. Prerequisites: Junior standing, SECO 221 and 222.

**526. Managerial Economics (3)** Application of the economic theory of profits, competition, demand, and costs to the analysis of problems arising in the firm and in decision making. Price policies, forecasting, and investment decisions are among the topics considered. Prerequisites: Junior standing, SECO 222 and 292 or equivalent.

## **Education Curriculum and Instruction (SEDC)**

**400. Resources and Technology in Teaching (1)** Proper and effective use of computer technology and audiovisual resources in education, including construction of materials, location of resources, and operation of equipment. Prerequisite: admission to the professional program or consent of instructor. Corequisites: for elementary education majors only: SEDF483, SEDL447, SEDL450, SEDL455, SEDR442.

## **Early Childhood Education (SEDE)**

**398. Topics in Early Childhood Education (1-3)** Prerequisite: junior standing and consent of instructor.

**399. Independent Study (3)** Prerequisite: junior standing and consent of instructor.

**410. Clinical I in Early Childhood Education (2)** Supervised clinical experience in early childhood settings. Observation and participation in classroom settings is required with a focus on observing children's development and language use, observing types of programs, and assessing management styles and techniques. Seminars and group discussions included. Four laboratory hours per week. Prerequisite: admission to the professional program. Corequisite: SEDE 420, 422, 445 and SEDF 485.

**420. The Young Child: Behavior and Development in Early Childhood (3)** Intellectual, physical, social, and emotional development, prenatal through grade four, within ecological context. Critical thinking, creative expression, the parenting role and developmental diagnosis including

assessment of development, normal and abnormal, will be addressed. Prerequisites: SEDF 333 or SPSY 302; admission to the professional program or consent of the instructor. Corequisites: SEDE 410, 422, 445 and SEDF 485.

**422. Survey of Early Childhood Education (3)** Programs for young children and the historical, social, economic, and philosophical influences on education. Attention is given to learning activities, materials, and equipment for kindergarten and primary grades. The assessment of readiness and maturation and the relationship of various subject areas to the child's development are emphasized. Prerequisite: admission to the professional program. Corequisites: SEDE 410, 420, 445 and SEDF 485.

**440. Clinical II in Early Childhood Education (2)** Supervised clinical experience in early childhood settings. Observation and participation in classroom settings is required with a focus on math, science, reading, social studies and creative arts. Seminars and group discussions included. Four laboratory hours per week required. Prerequisite: admission to the professional program. Corequisites: SEDR 414, SEDE 446, 447, 448 and 449.

**445. Language Development and Communicative Skill (3)** The relationship of language development and thinking to teaching the communicative skills to young children. Included are activities designed to develop oral language facility, writing (handwriting, spelling, functional, and creative writing), listening, and specific techniques dealing with diagnosis of language development. Students participate in a field based experience at a selected school site. Prerequisite: admission to the professional program. Corequisites: SEDR 414, SEDE 410, 420, 422 and SEDF 485.

**446. Math for the Young Child (3)** Materials and programs for teaching mathematics and the methods and theories for developing mathematics programs. Competence is gained in the selection, preparation, and presentation of materials. Prerequisite: admission to the professional program. Corequisites: SEDR 414, SEDE 440, 447, 448 and 449.

**447. Social Studies for the Young Child (3)** The selection, appropriate utilization, facilitation of development, and application of social science concepts to social problems and the socialization of children. Prerequisite: admission to the professional program. Corequisites: SEDR 414, SEDE 440, 446, 448 and 449.

**448. Science for the Young Child (3)** Materials and programs for teaching science and the methods and theories of developing science programs. Competence is gained in the selection, preparation, and presentation of materials. Prerequisite: admission to the professional program. Corequisite: SEDR 414, SEDE 440, 446, 447 and 449.

**449. Creativity and Play (3)** Theories of play and the development of play as central to children's learning. Knowledge and skills in structuring the classroom environ-



ment and curriculum experiences which will support and enrich a child's social, creative, and physical development in preprimary and primary school settings will be acquired. Multicultural perspectives and needs of exceptional children addressed. Prerequisite: admission to the professional program. Corequisites: SEDR 414, SEDE 440, 446, 447 and 448.

**468. Education of Young Children: An Ecological Approach (3)** An ecological study with emphasis on home-school relations, parent involvement, and community resources. Multicultural perspectives and needs of exceptional children are addressed. Prerequisite: admission to the professional program. Corequisite: SEDE 469.

**469. Directed Teaching in Early Childhood Education (12)** A supervised clinical experience, consisting of 14 weeks, normally with 50 percent at the 4K or 5K level and the remaining 50 percent in grades one, two, three, or four. This experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SEDE 468. Pass/fail credit.

#### Elementary Education (SEDL)

**398. Topics in Elementary Education (1-3)** Prerequisites: junior standing and consent of instructor.

**399. Independent Study (3)** Prerequisites: junior standing and consent of instructor.

**441. Elementary School Curriculum and Organization (3)** The entire school program, including grouping, grading, placement, and organization of both the children and the school for optimal learning. Prerequisite: admission to the professional program, SEDF 210, SEDF 333 or permission of the Dean of the School of Education.

**446. Teaching Mathematics in the Elementary School Middle School (3)** Materials, resources, programs and methods for teaching mathematics in grades 2-6. Included are supervised practicum experiences which promote reflective teaching in elementary school settings. Prerequisites: admission to the professional program and SEDL 441. Corequisites: SEDF 487, SEDL 448, SEDL 460, SEDR 443, SEDR 444.

**447. Teaching Social Studies in the Elementary and School (3)** Materials, resources, programs, and methods for teaching social studies in grades 2-6. Included are supervised practicum experiences which promote reflective teaching in elementary school settings. Prerequisites: admission to the professional program and SEDL 441. Corequisites: SEDF 487, SEDL 448, SEDL 460, SEDR 443, SEDR 444.

**448. Teaching Science in the Elementary School (3)** Materials, resources, programs, and methods for teaching science in grades 2-6. Included are supervised practicum experiences which promote reflective teaching in elemen-

tary school settings. Prerequisites: admission to the professional program and SEDL 441. Corequisites: SEDF 487, SEDL 446, SEL 460, SEDR 443, SEDR 444.

**450. Fine Arts in the Elementary School Curriculum (3)** Integrate the fine arts in elementary instruction. Teaching candidates will explore both content and methods for enriching all subject areas in the elementary classroom through the visual arts, drama, dance/movement, and music. Prerequisites: admission to the professional program, SEDL 441. Corequisites: SEDC 400, SEDF 483, SEDL 447, SEDL 455, SEDR 442.

**455. Clinical I in Elementary Education (2)** Supervised clinical experience in elementary settings. Observation and participation in diverse classroom settings is required with a focus on observation of students and teachers, analysis of classroom organization and management, use of technology to enhance learning, and implementation of lessons. Seminars and group discussions included. Four laboratory hours per week. Prerequisites: admission to the professional program, SEDL 441. Corequisites: SEDC 400, SEDF 483, SEDL 447, SEDL 450, SEDR 442.

**460. Clinical II in Elementary Education (2)** Supervised clinical experience in elementary settings. Requires assessment of k-12 students with interpretation of assessments, lesson planning based on assessments, implementation of lessons in science, math, and literacy with attention to reading and writing in the content areas. Reflections on teaching and k-12 student learning explored in group discussions and seminars. Four laboratory hours per week required. Prerequisites: SEDC 400, SEDF 483, SEDL 447, SEDL 450, SEDL 455, SEDR 442. Corequisites: SEDF 487, SEDL 446, SEDL 448, SEDR 443, SEDL 444.

**468. Directed Teaching in the Elementary School (15)** A fifteen week supervised clinical experience with 50 percent in grades two or three and 50 percent in grades four, five or six. In additional teaching in a k-12 school classroom, candidates will participate in regular seminars where they will (1) analyze problems relating to their k-12 experiences; (2) explore ethical and legal issues related to teaching; (3) consider current issues and trends in k-12 education; and (4) complete their professional portfolios. Prerequisite: approved application for directed teaching. Pass/fail credit.

**480. Directed Teaching in the Middle School (12)** A supervised clinical experience in grades five, six, seven, and/or eight, consisting of 14 weeks, normally with 50 percent in one concentration area and the remaining 50 percent in the other concentration area. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application of directed teaching. Corequisite: SEDF 485. Pass/fail credit.

#### Foundations of Education (SEDF)

**210. Foundations of Education (3)** The art and science of teaching. A comprehensive examination of the social,

historical, and philosophical influences that have shaped educational policies and practices in the USA with special emphasis on legal and ethical aspects of education. Supervised practicum experiences to promote reflective practice in a variety of settings are included.

### **333. Educational Development of the Lifelong Learner**

**(3)** Applications of psychology of learning and motivation to patterns of social, emotional, physical and intellectual development, and their relationship to teaching of children, adolescents, and adults.

### **341. Education Procedures for Exceptional Children**

**(3)** Theoretical and practical approaches to the education of the young exceptional child with emphasis on current remedial procedures. Included are alternative administrative arrangements and sources of academic therapy. Supervised field experiences are included.

### **483. Organization and Management of the Diverse Classroom**

**(3)** Structuring of physical, social, and instructional environment to maximize learning in a diverse classroom. Candidates will develop a comprehensive understanding of both practice and reactive approaches to management with attention to those practices most likely to support instruction in culturally diverse settings. Behaviorist and constructivist approaches, inclusion education, and conflict resolution are included. Elementary Education Major Prerequisites: Admission to the professional program, SEDL 441. Corequisites: SEDC 400, SEDL 447, SEDL 450, SEDL 455, SEDR 442. Learning Disability Major Prerequisite: Admission to the professional program.

**485. Diversity, Management, and Assessment (3)** The dynamic relationships among classroom diversity, management, instruction, and assessment. Through field experiences and reflection, students develop knowledge and skills in the interaction of these classroom elements. Prerequisite: Admission to the professional program. Corequisites: Depending on major, one of the following: SEDE 410, 420, 422 and 445; SEDL 480; SEDS 473-481; SPED 479.

### **487. Student, Teacher, and School Assessment (3)**

Formal and informal assessment of elementary age students as well as teachers and schools. Attention will be given to the appropriate uses of standardized testing as well as teacher made assessments with particular emphasis on the interpretation of test results and their relationship to instructional goals. Consideration will also be given to the issue of accountability and appropriate options for evaluating teachers and schools. Prerequisites: Admission to the professional program, SEDL 441, SEDR 442. Corequisites: SEDR 443, SEDR 444, SEDL 446, SEDL 448, SEDL 460.

## **Reading Education (SEDR)**

**414. Emergent and Early Literacy (3)** Theoretical and instructional issues relating to challenges children en-

counter when learning to read and write. Research on the expected development of such behaviors through stages typically found in the preprimary and primary school years are explored. Procedures, materials, programs, and assessment techniques for developing literacy are investigated. Prerequisite: admission to the professional program. Corequisites: SEDE 440, 446, 447, 448, 449.

**418. Reading in the Secondary School (3)** The significance of reading as it relates to all content areas. The focus is on strategies for making any text material more accessible to the student, and attention is given to matching the learner and the learning. Seven hours of tutoring in the area of certification are required. Prerequisite: SEDF 333 and admission to the professional program. Prerequisite for physical education majors: SPSY 302.

### **442. The Emergent Reader: Learning to Read and Write (3)**

Scaffolding reading and writing development for the young child. Teaching candidates review the essentials of language development and focus on the transition from oral language to initial reading and writing. Effective strategies and materials for nurturing literacy development of children ages 5-7 will be emphasized. Elementary Education Major Prerequisites: admission to the professional program, SEGL 484 and SEDL 441. Corequisites: SEDC 400, SEDL 450, SEDL 447, SEDL 455, SEDR 483. Learning Disability Major Prerequisites: admission to the professional program, SEGL 484.

### **443. The Fluent Reader: Reading and Writing to Learn (3)**

Scaffolding reading and writing development of the elementary and middle grades student. Teaching candidates focus on the transition from initial reading and writing to reading and writing in the content areas. Effective strategies and materials for nurturing literacy development in children ages 8-12 will be emphasized. Elementary Education Major Prerequisites: admission to the professional program, SEDR 442, SEDL 441. Corequisites: SEDR 444, SEDL 446, SEDL 448, SEDL 460, SEDF 487. Learning Disability Major Prerequisites: admission to the professional program, SEDR 442.

### **444. The Struggling Reader: Addressing literacy Problems (3)**

Scaffolding reading and writing development for learners experiencing difficulty. Teaching candidates will investigate assessments, strategies, and programs appropriate for children with literacy problems including learners from diverse backgrounds and children with special needs. Prerequisites: admission to the professional program, SEDL 441, SEDR 442. Corequisites: SEDR 443, SEDL 446, SEDL 448, SEDL 455, SEDF 487.

## **Secondary Education (SEDS)**

**398. Topics in Secondary Education (1-3)** Prerequisites: junior standing and consent of instructor.

**399. Independent Study (3)** Prerequisites: junior standing and consent of instructor.

**441. Middle and Secondary School Curriculum (3)** Organization, historical context, foundations for development, determinants, planning, design, and strategies for change of middle and secondary school curricula. Prerequisites: admission to the professional program or consent of the instructor. Corequisite: SEDS 442.

**442. Middle and Secondary School Teaching Methodology (3)** Theories of adolescent and young adult development and the application of such to the teaching-learning process. Core topics include instructional methods appropriate for middle and secondary school students; addressing student needs; and diversity through appropriate instruction, unit and lesson planning, evaluation of student performance, and teacher effectiveness evaluation. Supervised practicum experiences, designed to promote reflective teaching, in middle or secondary school settings, are included. Prerequisites: SEDF 333 and admission to the professional program or consent of the instructor. Corequisite: SEDS 441.

**445. Teaching Middle and Secondary English/Language Arts (3)** Methods, materials, resources, issues and trends related to teaching specific subject content in middle and secondary schools, including instructional planning and delivery of instruction. Supervised practicum experiences are designed to promote reflective teaching in middle and secondary school settings. Prerequisites: admission to the professional program and SEDS 442, or consent of instructor.

**446. Teaching Middle and Secondary Mathematics (3)** Methods, materials, resources, issues and trends related to teaching specific subject content in secondary schools, including instructional planning and delivery of instruction. Supervised practicum experiences are designed to promote reflective teaching in middle and secondary school settings. Prerequisites: admission to the professional program and SEDS 442, or consent of instructor.

**447. Teaching Middle and Secondary Social Studies (3)** Methods, materials, resources, issues and trends related to teaching specific subject content in middle and secondary schools, including instructional planning and delivery of instruction. Supervised practicum experiences are designed to promote reflective teaching, in middle and secondary school settings. Prerequisites: admission to the professional program and SEDS 442, or consent of instructor.

**448. Teaching Middle and Secondary Science (3)** Methods, materials, resources, issues and trends related to teaching specific subject content in middle and secondary schools, including instructional planning and delivery of instruction. Supervised practicum experiences are designed to promote reflective teaching in middle and secondary school settings. Prerequisites: admission to the professional program and SEDS 442, or consent of instructor.

**449. Teaching Foreign Language in Secondary Schools (3)** Methods, materials, resources, issues and trends related to teaching specific subject content in secondary schools. Also includes instructional planning and delivery of instruction. Supervised practicum experiences designed to promote reflective teaching, in secondary school settings, are included. Prerequisites: admission to the professional program and SEDS 442, or consent of instructor.

**473. Directed Teaching in Secondary School English (12)** A supervised clinical experience consisting of 14 weeks in secondary school settings. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SEDF 485. Pass/fail credit.

**474. Directed Teaching in Secondary School Foreign Language (12)** A supervised clinical experience consisting of 14 weeks in secondary school settings. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SEDF 485. Pass/fail credit.

**475. Directed Teaching in Secondary School History and Social Studies (12)** A supervised clinical experience consisting of 14 weeks in secondary school settings. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SEDF 485. Pass/fail credit.

**478. Directed Teaching in Secondary School Mathematics (12)** A supervised clinical experience consisting of 14 weeks in secondary school settings. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SEDF 485. Pass/fail credit.

**481. Directed Teaching in Secondary School Natural Science (12)** A supervised clinical experience consisting of 14 weeks in secondary school settings. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SEDF 485. Pass/fail credit.

#### **Education and Technology (SEDT)**

**420. Information Systems in Education (3)** The application of information systems to a variety of educational settings. Topics include policy issues directing the design and implementation of education information systems, particularly data collecting and reporting protocols re-

quired for compliance with local, state, and federal mandates. Prerequisites: SEDF210, SEDF333, SEDF341, SCSC 234, SIMS211, SCSC412.

**430. Instructional Design and Methods for Information Systems Training (3)** Design and delivery of training programs for users of information systems and related technologies. Activities include the production of training materials, management of instructional time and selection of appropriate resources. Methods for the assessment and evaluation of the instructional materials and outcomes are an integral part of this course. Prerequisites: SEDF 210, SEDF 333, SEDF 341, SCSC 234, SIMS 211, SCSC 412.

**497. Information Systems Education Internship (3)** Supervised work experience in a district office and other administrative school sites. Emphasis is on the design, implementation, and service of information systems integral to the sponsoring school and district. The individualized course of study is designed to meet pre-established learning objectives. A "work practice" plan is required and must be approved by the sponsoring organization and the course instructor. Prerequisites: SEDF210, SEDF333, SEDF341, SCSC234, SIMS211, SCSC412.

#### **Special Education: Learning Disability (SELD)**

**410. Methods of Teaching Students with LD (3)** Instructional strategies and practice for teaching learners with LD. Prerequisite: admission to professional program. Corequisites: SELD412; SELD446.

**412. Characteristics of Students with LD (3)** Characteristics of students who have learning disabilities which are manifested in instructional settings. Specific characteristics that are factors in developing comprehensive, longitudinal individualized programs as well as guidelines regarding LD referral, assessment and placement procedures will be presented. Prerequisite: admission to the professional program. Corequisite: SELD410, SELD446.

**414. Individualized Curriculum for Students with Disabilities (3)** The various etiologies of conditions affecting students with mild/moderate disabilities. Cognitive characteristics of learners with mild/moderate disabilities and the impact on language development, academic performance, social skills, and emotional behavior will be included. Prerequisite: SELD412. Corequisites: SEDC402; SELD483; SELD440.

**415. Reading Disorders and Reading Methods (3)** Specific methods designed to facilitate the development of reading skills of students with learning disabilities. A practicum experience is required. Prerequisite: SELD414. Corequisites: SELD445; SELD486.

**440. Practicum in the Instruction of Students with Disabilities (3)** Sequencing, implementing, and evaluating individual learning objectives in a professional setting. Students will select, adapt, and use instructional strategies and materials according to characteristics of the learner.

Prerequisite: SELD. Corequisites: SEDC402; SELD414; SELD483.

**445. Language Disorders and Language Arts Methods (3)** Learning disability specific methods designed to facilitate the development of language and social skills. A practicum experience is required. Prerequisite: SELD414. Corequisite: SELD415; SELD486.

**446. Math Disabilities and Math Methods (3)** Learning disability specific methods designed to facilitate the development of mathematics concepts and skills. A practicum experience is required. Prerequisites: SMTH301 and SMTH302 and admission to professional program. Corequisites: SELD410; SELD412.

**449. Issues and Trends in Exceptionalities (3)** The philosophical, historical, and legal foundations of special education that connect with current issues and trends in special education. Prerequisite: admission to professional program. Corequisite: SELD470.

**470. Directed Teaching of Students with Learning Disabilities (12)** A supervised clinical experience, consisting of 14 weeks with 50 percent in a special education resource classroom and the remaining 50 percent in an inclusive regular classroom. The experience includes an exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: approved application for directed teaching. Corequisite: SELD449. For pass/fail credit.

**483. Assessment of Students with Disabilities (3)** The techniques and practices of diagnostic assessment, including ethical concerns and legal provisions/guidelines. Emphasis is on identifying typical, delayed, and disordered communication and reasoning patterns of individuals with exceptional learning needs. Prerequisite: SELD412. Corequisites: SEDC402; SELD414; SELD440.

#### **Engineering (SENG)**

**101. Introduction to Engineering I (2)** Introduction to the engineering profession and the basic principles and physical laws that form the foundation of engineering analysis. Prerequisite or corequisite: SMTH143.

**102. Introduction to Engineering II (2)** Principles and practice of visualization and graphical representation using modern computer-aided design tools. One lecture and two laboratory hours per week. Prerequisite: SENG101.

**200. Statics (3)** Introduction to the principles of mechanics. Equilibrium of particles and rigid bodies. Distributed forces, centroids, and centers of gravity. Moments of inertia of areas. Analysis of simple structures and machines. A study of various types of friction. Prerequisite or corequisite: SMTH144.

**210. Dynamics (3)** Kinematics of particles and rigid bodies. Kinetics of particles with emphasis of Newton's sec-

ond law; energy and momentum methods for the solution of problems. Applications of plane motion of rigid bodies. Prerequisite: SENG 200.

**211. Introduction to Computer Engineering I (3)** Computer structures, logic design, sequential machines, engineering computing. Prerequisite or corequisite: SMTH 144.

**221. Introduction to Electrical Engineering I (3)** Linear circuit analysis. Prerequisite or corequisite: SMTH 243.

**260. Introduction to Mechanics of Solids (3)** The concepts of stress and strain; stress analysis of basic structural members; consideration of combined stress, including Mohr's circle; introductory level analysis of deflection; buckling of columns. Prerequisite: SENG 200. Prerequisite or corequisite: SMTH 244.

**290. Thermodynamic Fundamentals (3)** Definitions, work, heat and energy. First law analysis of systems and control volumes. Second law analysis. Prerequisite or corequisite: SMTH 244.

### English Language and Literature (SEGL)

*Note: The completion of Composition and Literature (102) or the equivalent is prerequisite to enrollment in all higher level English courses. Only those courses that are numbered above 300 may count toward a major in English.*

*Advanced standing in freshman English classes may be achieved through appropriate scores on Advanced Placement (AP) tests, passing of appropriate College Level Examination Program (CLEP) tests, institutional credit by examination, or the English placement tests administered to all incoming USC Upstate freshmen. Details may be found in appropriate sections of this catalog or in consultation with the chair of the department of languages, literature, and composition.*

*Courses are offered in rotation. If you are interested in a particular course, check with the department chair to see when it will be offered.*

**101. Composition (3)** Closely supervised instruction and practice in critical reading and writing. Attention is given to planning, drafting, revising, and editing a variety of texts including essays and research papers. For students whose placement testing indicates a need for more intensive study, English 101 with a noncredit lab (English 101A) is mandatory to provide supplemental instruction and practice in writing.

**101H. Honors Composition (3)** Thematic studies designed by English faculty specifically for honors students. Its focus may vary depending on the instructor's area of interest. Intensive reading, writing, research, and a service component are included. Prerequisite: Admission to honors program as a first year student or permission of director of honors program. Students who earn an F in

SEGL 101 H may not re-enroll in SEGL 101H. Students who pass SEGL 101 H with a D are not eligible to enroll in SEGL 102H.

**102. Composition and Literature (3)** The writing of expository essays, critical essays, and research-based literary analysis with an introduction to literature. Prerequisite: SEGL 101.

**102H. Honors Composition and Literature (3)** Study of works of literature and their social and historical contexts designed by English faculty specifically for honors students. Its focus may vary depending on the instructor's area of interest. Intensive reading, writing, research, and a service component are included. Prerequisites: SEGL 101H with a C or better and admission to honors program or permission of director of honors program. Students who earn an F in SEGL 102H must successfully complete SEGL 102.

**208. Introduction to Creative Writing (3)** Beginning writing workshop. Writers gain experience in genres of poetry, fiction, and non-fiction.

**240. Introduction to Film (3)** A survey of the basic elements of cinema including mode of production, narrative structure, stylistic design, camera and marketing. Prerequisite: SEGL 102.

**245. Professional Writing (3)** Developing communication skills for the successful professional. Students reflect and apply principles of appropriate content, style and format for memos, letters, reports, resumes, interviews and presentations.

**250. Selected English Studies Abroad (3-6)** A selection of British writing, together with immersion in British culture.

**252. Understanding English Grammar (3)** Intensive review of grammatical principles and mechanics of English with emphasis on exploration and discovery of principles of English grammar usage.

**275. Masterpieces of World Literature (3)** Selections from the literature of western and non-western cultures from ancient to modern times.

**279. Survey of American Literature (3)** Writings from colonial times to the present.

**283. Native American Literature (3)** Selected readings by Native American writers, including novels, short stories and poetry. SEGL 283/SEGL 383 will be offered concurrently. The reading and writing assignments for students taking SEGL 383 will be longer and the standard for grading will be more demanding. Students may not enroll for both courses.

**289. Survey of British Literature (3)** Poetry, drama and prose from the Old English Period to the present.

**291. African American Literature (3)** A survey of writings by African American authors. The literary types studied may vary. English 291/391 will be offered concurrently. The reading and writing assignments for students enrolled in SEGL 391 will be longer and the standard for grading will be more demanding. Students may not receive credit for both courses.

**295. Introduction to the Study of Literature (3)** Introduction to terminology and methods for the study of literature and criticism. The course involves the scrutiny of primary and secondary texts as well as independent research. Required for English majors. Students who wish to major in English should complete this course before enrolling in 300-level English courses.

**301. Mythical, Classical, and Biblical Backgrounds (3)** An overview of central myths and stories of classical and biblical traditions. Myths, characters, narrative patterns, archetypes, and the ways classical texts have shaped imaginative literature are addressed.

**307. Literature and Nature (3)** Readings in selected literature in which the natural environment is a central issue.

**308. Intermediate Workshop in Creative Writing (3)** Further experience in writing poetry, fiction, and non-fiction. Prerequisite: SEGL 208 or consent of instructor.

**318. Writing and Computers (3)** Research, analysis, composition and publication with the assistance of computer applications. Prerequisites: SCSC 138 or SEDC 120.

**319. Development of the Novel (3)** A critical and historical study of the novel surveying major novels and novelists and illustrating the characteristics of the genre, its historical development, and its reflection of significant literary periods and movements.

**320. Development of Short Fiction (3)** A critical and historical study of short fiction surveying the genre and illustrating its characteristics, historical development, and reflection of significant literary periods.

**322. Contemporary Literature (3)** Comparative works by contemporary world writers.

**325. Modern German Literature in Translation (3)** Masterpieces of German literature. The selection may include texts by T. Mann, Kafka, Brecht, Hesse and Grass. Taught in English. This course may not be used to satisfy a foreign language requirement. Prerequisite: consent of instructor.

**329. Development of Poetry (3)** The development of poetry as a genre and art form. Major periods, movements, and poets from Western and world canons illustrate the richness of the poetic tradition.

**330. Development of Drama (3)** The development of plays and playwrights. Plays from the classical period are ex-

plored, and the development of drama through its major movements to the present time is charted.

**341. Literature and Film (3)** Adaptations of literature into film and/or thematically linked studies of literature and film. Facets of film that particularly relate to novels, short stories and/or plays are emphasized.

**342. Film Genre (3)** Characteristics of one or more established movie genre such as documentary, film noir, neorealism, new wave cinema, satire, comedy and others. The genre selected may vary based on the instructor's area of interest or expertise.

**345. Advanced Professional Writing (3)** Advanced training in developing communication skills for the workplace. Particular emphasis is placed on conducting primary and secondary research, on proposal and report writing, and on writing as a member of a group. Prerequisite: SEGL 245 or consent of instructor.

**346. Technical Writing (3)** The writing of informative text and techniques for presenting it in appropriate formats. Particular emphasis is placed on creating concise texts which use pictures, charts, graphs, and other visuals to convey information to readers in fields such as computer science, engineering, medicine, industrial technology, and other professions. Prerequisite: SEGL 245

**350. Advanced Selected English Studies Abroad (3-6)** Role of locale in a selection of British writing, together with immersion in British culture.

**352. Text Editing (3)** Training in preparing text for publication. Included are an intensive grammar review and the practical application of the principles of grammar, punctuation, and usage to create effective texts.

**368. Life Writing and Biography (3)** The writing, reading, and criticism of biography, autobiography, and other non-fictional prose.

**370. Creative Nonfiction (3)** The study and practice of writing reality-based prose influenced by the techniques of the visual narrative of film and the innovative language and style of poetry, fiction, and drama. Strategies for creating works of literary journalism; travel, nature, and science writing; narrative nonfiction; and other sub-genre areas of creative nonfiction are practiced. Prerequisite: SEGL 208 or consent of instructor.

**371. Grant Writing (3)** Writing effective expository text for grants and proposals. The skills of writing for a particular purpose and audience; conforming to stated guidelines; and using clear, concise language are emphasized.

**373. Writing Workshop for Elementary School Teachers (3)** Application of research informing the teaching of writing to elementary school students. The class is conducted as a writing workshop, and students learn to teach writing by exploring and refining their own composing processes.

**374. Writing Workshop for Secondary School Teachers (3)** Study and application of research informing the teaching of writing to secondary school students. The class is conducted as a writing workshop, and students learn to teach writing by exploring and refining their own composing processes.

**383. Native American Literature (3)** Selected readings by Native American writers, including novels, short stories and poetry. SEGL 283/SEGL 383 will be offered concurrently. The reading and writing assignments for students taking SEGL 383 will be longer, and the standard for grading will be more demanding. Students may not enroll for both courses.

**391. African American Literature (3)** A survey of writings by African American writers. The literary types studied may vary. SEGL 291/391 will be offered concurrently. The reading and writing assignments for students enrolled in SEGL 391 will be longer and the standard for grading will be more demanding. Students may not receive credit for both courses.

**395. Narrative Poetry, Epic and Heroic (3)** Selected readings (in translation) from the epic and heroic poetry of the world.

**397. Topics in Writing (3)** Intensive experience and practice in writing selected types of poetry or prose.

**398. Topics in Language and Literature (3)** Intensive study of selected topics.

**399. Independent Study (1-3)** Directed research and reading project outside the classroom of a complex and extensive nature in keeping with the student's major creative and/or scholarly interests. In addition to writing required for a particular independent study project, a written report on work accomplished is required at the end of the term. Research involves both primary and secondary sources. May be repeated with the consent of the instructor and advisor for total of no more than six hours of undergraduate credit. Prerequisites: Junior or senior standing. GPA 2.0 overall, 2.5 in English courses. A minimum of 6 hours in English courses numbered 300 and above. Consent of the instructor and advisor. A university contract must be signed with all required signatures.

**400. A Survey of Literature of Medieval England (3)** A representative selection of early literature from the British Isles in English (Old and Middle), Latin, Irish, Welsh, and French during the Middle Ages.

**401. Chaucer (3)** Chaucer's works, with special attention to *The Canterbury Tales*.

**405. Shakespeare Survey (3)** A selection of comedies, histories, tragedies, and romances. Plays from the early and late periods of Shakespeare's career, including not only his most famous works but also his lesser known plays, are surveyed.

**406. Studies in Shakespeare (3)** A critical approach to thematic, topical, or theoretical aspects of certain plays, narrative poems, and sonnets. The specific themes and area of focus may vary.

**408. Milton (3)** *Paradise Lost* and other poetry. Prerequisite: junior standing or permission of instructor.

**409. English Literature, 1500-1660 (3)** Poetry and prose of major Renaissance and Commonwealth writers.

**411. British Literature, 1660-1740 (3)** Poetry, prose and drama of major Restoration and early 18th century writers.

**412. British Literature, 1740-1800 (3)** Poetry, prose and drama of major writers.

**417. Romanticism (3)** The 18th century transition from classicism to romanticism, and the 19th century masters: Wordsworth, Coleridge, Byron, Shelley and Keats.

**419. Victorian Literature (3)** Poetry and prose of major Victorian writers.

**422. Modern Drama (3)** British, American and continental drama beginning with Ibsen and Strindberg.

**423. British Literature, 1900-1950 (3)** Poetry, prose and drama of major writers.

**424. British Literature, 1950-to the Present (3)** Poetry, prose and drama of major writers.

**425. American Literature, Beginnings to 1830 (3)** Colonial and revolutionary American writing with special attention to literary types and to the influence of religion and politics.

**426. American Literature, 1830-1865 (3)** Readings in representative works.

**427. American Literature, 1865-1910 (3)** Readings in representative works.

**428. American Literature, 1910-1950 (3)** Readings in representative works.

**429. Literature of the Harlem Renaissance (3)** Philosophy and literature of the New Negro movement of the 1920s, including works by Hughes, Hurston, Cullen, Fauset and McKay.

**430. American Literature, 1950-Present (3)** Readings in representative works.

**436. Science Fiction Literature (3)** Representative science fiction from the beginnings of the genre to the present.

**437. Women Writers (3)** Representative works written by women.

**447. Southern Literature (3)** An historical and critical survey of selected works of Simms, Lanier, Cable, Harris, Wolfe, Faulkner, O'Connor, Johnson, Wright, McCullers, and other southern writers.

**451. Introduction to Linguistics (3)** An overview of language and linguistics oriented toward language as a reflection of the structure of the human mind and human society. Phonetics, phonology, morphology, syntax and semantics and how they relate to linguistic theory, to issues of language use, to questions of language in the social context, and to issues of language acquisition and language learning are emphasized.

**453. Development of the English Language (3)** History and evolution of the English language reflecting changes in phonetics, semantics, morphology, and syntax, as well as assembly of dictionaries.

**455. Introduction to Sociolinguistics (3)** Introduction to sociolinguistics and the study of language variation in speech communities around the world. Attention is given to the social context of linguistic diversity including dialectology, language and gender, language and ethnicity, pidgins and creoles, new varieties of English, cross-cultural communication, discourse analysis, and applied sociolinguistics.

**459. Theories of Composition (3)** The theory and principles of rhetoric and the application of these principles in the student's own thinking and writing.

**468. Advanced Creative Writing (3)** An intensive course in one genre (poetry, fiction, creative non-fiction, among others) to be announced by the instructor in advance. The genre selected will vary based on the instructor's area of interest and expertise. This course can be taken more than once if the genre is different. Prerequisite: SEGL 308

**478. Screenwriting (3)** An intensive course in writing fiction screenplays. Attention is given to the screenplay form, scene structure and character development. Screenings and readings include contemporary films and their scripts, both studio and independent features. Prerequisites: SEGL 102, 240.

**479. Non-fiction Films (3)** A study of an international selection of documentary, propaganda, and informational films.

**480. Interdisciplinary Approaches to Film (3)** Film explored from the combined perspectives of English and an additional discipline.

**481. Identity in Literature and Film (3)** Expressions of individual or group identity as revealed and reflected in literature and film.

**482. Film Theory and Criticism (3)** Various film theories, including their methods of analysis and standards of

judgement. Significant attention is given to films from theoretically recognized positions.

**483. Theory of Literary Criticism (3)** Various theories of literary criticism with the aim of establishing standards of judgment. Practice in criticism of literary works.

**484. Children's Literature (3)** Representative works in children's literature appropriate for the elementary school child.

**485. Adolescent Literature (3)** A survey of literature written for adolescent readers, especially the realistic problem novel. Special attention is placed on defining the characteristics of the field and on developing critical standards for evaluating the works.

**490. Senior Seminar (3)** The integration of knowledge; the exploration of ethical issues; and the application of the skills of research, analysis, and writing about literature at an advanced level. Completion of an academic portfolio, self-directed research and writing, and formal oral presentations are required. The specific focus of the course is designed by faculty and may vary depending on the instructor's area of interest and the students' areas of concentration. Prerequisites: Senior standing; SSPH 201; SEGL 295; and 15 hours of SEGL courses numbered 300 or above, including either 459, 482, or 483.

**499. Internship (1-3)** Supervised professional experience or research outside of the classroom, involving a meaningful project or activity for the employing firm or organization and a scholarly project for the student. For three credit hours, a minimum of 135 hours of supervised work, periodic class meetings and consultation with the instructor are required. A contractual agreement signed by the employer, the student, the instructor, and the dean of the college is mandatory. A student may repeat SEGL 499 once with a different internship contract description for a total of no more than six hours of undergraduate credit. Prerequisite: Junior or senior standing; a minimum of six hours in major courses numbered 300 and above; GPA 2.0 overall, 2.5 in English courses; and consent of the faculty supervisor and advisor.

### **English as a Second Language (SESL)**

**101. Writing I for Non-native Speakers of English (3)** Developing in improving the writing skills of the non-native English speaker. Confidence in writing abilities is built through a systematic approach to the understanding of writing as a process.

**105. Effective Reading I for Non-native Speakers of English (3)** Developing and improving the reading and vocabulary skills of the non-native English speaker.



## French (SFRN)

*Note: Unless otherwise indicated, readings, lectures and discussion in foreign language courses above the elementary level are principally in the language concerned. Incoming students with previous experience in a foreign language must take a placement test.*

**101, 102. Introductory French (3,3)** Fundamentals of the language and culture through speaking, listening, reading and writing. Prerequisite for 102 is SFRN 101 or placement through testing.

**103. Introductory Reading in Business and Technical French (3)** Interpretation of basic written material in business and science.

**121. Elementary French (3)** Intensive review and continuation of basic grammar and vocabulary for fundamental communication skills. Placement in SFRN 121 assumes a minimum of two years high school level experience in the language.

**201. Intermediate French (3)** Review of the basic principles of the language, with emphasis on reading, writing and oral skills. Prerequisite: SFRN 102 or 121 or placement through testing.

**202. Intermediate French (3)** Review of the basic principles of the language, with emphasis on writing, oral skills, and the reading of literary and other authentic texts. Prerequisite: SFRN 201 or placement through testing.

**204. French Culture (3)** Major artistic, literary and historical movements from the Middle Ages to modern times that have contributed to the French cultural identity. Taught in English. Prerequisite: SEGL 102 or consent of instructor.

**210. French Oral Communication (3)** Enhancement of oral expression through group discussions, oral presentations, and vocabulary development. Prerequisite: SFRN 202 or placement through testing.

**250. Selected French Studies Abroad (3-6)** Development of intermediate level communication skills together with immersion in the culture of a foreign country. Prerequisite: SFRN 102 or 121 or consent of instructor.

**308. Business French (3)** Fundamental elements of the language and exercises in composition centering on business communication skills. Prerequisite: SFRN 202 or consent of instructor.

**309. French Grammar and Composition (3)** Fundamental elements of the language and exercises in composition. Prerequisite: SFRN 202 or consent of instructor.

**310. French Conversation (3)** Advanced vocabulary development and acquisition of fluency through aural and oral activities. Prerequisite: SFRN 210 or placement test.

**320. French Civilization (3)** Culture and civilization of the French-speaking world, with major emphasis on France. Prerequisite: SFRN 202 or consent of instructor.

**330. Survey of French Literature I (3)** A selection of medieval and Renaissance French literature through the sixteenth century. Prerequisite: SFRN 202 or consent of instructor.

**331. Survey of French Literature II (3)** A selection of works from the seventeenth century through the present. Prerequisite: SFRN 202 or consent of instructor.

**350. Selected French Studies Abroad (3-6)** Development of advanced level communication skills together with immersion in the culture of a foreign country. Prerequisite: SFRN 202 or 210 or 250 or consent of instructor.

**398. Topics in French Language or Literature (1-3)** Prerequisite: SFRN 202 or consent of instructor.

**399. Independent Study or Internship (1-3)** Supervised professional experience or research outside the classroom. For three internship credit hours, a student is to work 135 hours with an approved agency; for two credit hours, 90 hours; for one credit hour, 45 hours. For an internship or for an independent study, a contract must be signed by the student and by the instructor of record and other designated faculty and administrators. A student may repeat SFRN 399 once with a different internship or independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisites: GPA 2.0 overall, 2.5 in foreign language course and consent of faculty supervisor.

**402. Masterpieces of French Drama (3)** Selected works from the beginning of French theatre through the present. Prerequisite: SFRN 202 or consent of instructor.

**403. Masterpieces of the French Novel (3)** Selected works from the beginning of the French novel through the present. Prerequisite: SFRN 202 or consent of instructor.

**450. Foreign Language Technology (3) (=SSPN 450)** Use of language laboratories, computers, videos, and various other materials in foreign language teaching. Prerequisite: SFRN 202 or SSPN 202 or consent of instructor.

**453. Introduction to Romance Linguistics (3) (=SSPN 453)** Descriptive, historical and applied linguistics in French and Spanish. Prerequisite: SFRN 202 or SSPN 202 or consent of instructor.

**490. Senior Seminar in French (3)** Reading and research on selected topics designed to integrate knowledge, to explore ethical issues, and to gain experience in research and oral presentation. Prerequisite: two French literature courses.

## Geography (SGEG)

**101. The Upstate (3)** Uses the landscape approach to study the 10-county area of Northwestern South Carolina. Spatial, economic, social, cultural, demographic and natural traits of the contemporary urban, suburban and rural landscapes are examined after an introduction to the landscape approach.

**103. Introduction to Geography (3)** Principles and methods of geographical inquiry.

**121. Principles of Regional Geography (4)** Description of the regional method and an analysis of the region forming processes. Emphasis is placed on the construction of local regions and the interpretation of regional constructs. Three class and two laboratory hours per week.

**201. Introduction to Physical Geography (4)** The spatial significance of land forms, water bodies, and soils. Emphasis is placed on both the man-land relationship and the concept of location. Three class and two laboratory hours per week.

**202. Introduction to Weather and Climate (4)** The interrelationship of weather elements and controls and the spatial distribution of climate and vegetation. Three class and two laboratory hours per week.

**212. Introduction to Economic Geography (3)** Factors in location and production of commodities, commerce and manufacturing.

**340. Geography of Population, Settlement and Migration (3)** (=SSOC 327) Births, deaths, migration and the distribution of human populations, and the analytical methods used in the study of each of these topics.

**424. Geography of North America (3)** Physical and cultural geography of North America with emphasis on the United States.

## Geology (SGEL)

**101. Physical Geology (4)** Methods and procedures of science for interpretation of the earth. The natural processes and their products — the minerals, rocks, fossils, structure and surface forms of the earth are considered. Emphasis is placed on the interplay between hypothesis, experiment, and observable fact which characterize productive physical science. Three class and three laboratory hours per week.

**102. Historical Geology (4)** The practice of geology as an historical science with emphasis on the methods of analysis, nature of the record, and guiding principles that have allowed geologists to decipher the history of the earth. Three class and three laboratory hours per week.

**103. Environmental Earth Science (4)** Analysis of the basic energy cycles of the earth the interaction of human

activity with earth processes to affect the environment. Three class and three laboratory hours per week.

**120. Geology of the Southeast (3)** Investigation of the geological processes responsible for the land forms and natural resources of the southeastern United States. Three class hours per week and field trips are required.

**121. Geology of North America (3)** Analysis of the geological history and development of the North American landmass, regions and resources. Comparison of similarities among regions, though formed at widely separated periods in earth history, will be emphasized. Three class hours per week and field trips are required.

**123L. Geology of National Parks - Field Study (1)** Developing field techniques in a national park setting. Principles of geology are reinforced in the classroom component followed by travel to a national park for geological research and the development of appropriate field notes. Prerequisite: SGEL 121 or consent of instructor.

**131. Earth Resources (3)** Mineral, earth and water resources, with particular attention to their occurrence and use, and the interaction between geology and economics as limiting factors on resource development. Three class hours per week and field trips are required.

**241. Environmental Geology of South Carolina (3)** An investigation for the environmental geology of South Carolina focusing on specific case studies including water issues, beach management, waste disposal, energy production and use. Prerequisites: Sophomore standing or consent of the instructor.

**310. Paleobiology (4)** Taxonomy and morphology of fossil organisms. Three class and three laboratory hours per week. Prerequisite: SGEL 102 or SBIO 102 or consent of instructor.

**399. Independent Study (1-6)** Directed research project depending on student interest and needs. Prerequisite: consent of instructor.

## German (SGRM)

*Note: Unless otherwise indicated, readings, lectures and discussion in foreign language courses above the elementary level are principally in the language concerned. Incoming students with previous experience in a foreign language must take a placement test.*

**101, 102. Introductory German (3,3)** Fundamentals of the language and culture through speaking, listening, reading and writing. Prerequisite for 102 is SGRM 101 or placement through testing.

**105, 106. Introduction to Business German (3,3)** Basic oral and written language skills, as well as intercultural awareness necessary for the modern business environment. Prerequisite for 106 is SGRM 105 or consent of instructor.

**121. Elementary German (3)** Intensive review and continuation of basic grammar and vocabulary for fundamental communication skills. Placement in SGRM 121 assumes a minimum of two years high school level experience in the language.

**201. Intermediate German (3)** Review of the basic principles of the language, with emphasis on reading, writing, and oral skills. Prerequisite: SGRM 102 or 121 or placement through testing.

**202. Intermediate German (3)** Review of the basic principles of the language, with emphasis on writing, oral skills, and the reading of literary and other authentic texts. Prerequisite: SGRM 201 or placement through testing.

**204. German Culture (3)** Major artistic, literary and historical movements from the Middle Ages to modern times that have contributed to the German cultural identity. Taught in English. Prerequisite: SEGL 102 or consent of instructor.

**210. German Oral Communication (3)** Enhancement of oral expression through group discussion, oral presentations, and vocabulary development. Prerequisite: SGRM 202 or placement through testing.

**250. Selected German Studies Abroad (3-6)** Development of intermediate level communication skills together with immersion in the culture of a foreign country. Prerequisite: SGRM 102 or 121 or consent of instructor.

**308. Business German (3)** Elements of language centering on written business communication skills. Prerequisite: SGRM 202 or consent of instructor.

**310. German Conversation (3)** Advanced vocabulary development and acquisition of fluency through aural and oral activities. Prerequisite: SGRM 210 or placement through testing.

**325. Modern German Literature in Translation (3)** Masterpieces of German literature. The selection may include texts by T. Mann, Kafka, Brecht, Hesse and Grass. Taught in English. This course may not be used to satisfy a foreign language requirement. Prerequisites: SEGL 102 or consent of instructor.

**350. Selected German Studies Abroad (3-6)** Development of advanced level communication skills together with immersion in the culture of a foreign country. Prerequisite: SGRM 202 or 210 or 250 or consent of instructor.

**398. Topics in German Literature/Language (1-3)** Prerequisite: SGRM 202 or consent of instructor.

**399. Independent Study or Internship (1-3)** Supervised professional experience or research outside the classroom. For three internship credit hours, a student is to work 135 hours with an approved agency; for two credit

hours, 90 hours; for one credit hour, 45 hours. For an internship or for an independent study, a contract must be signed by the student and by the instructor of record and other designated faculty and administrators. A student may repeat SGRM 399 once with a different internship or independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisites: GPA 2.0 overall, 2.5 in foreign language course, and consent of faculty supervisor.

### **Government and International Studies (SGIS)**

**201. American National Government (3)** The formation and development of the national government, its organization and powers.

*Note: Government and International Studies 201 must be completed prior to enrolling in upper division government and international studies courses.*

**210. Research Methods in Political Science (3)** Various approaches to the rigorous study of political phenomena. The emphasis is upon the critical thinking and evaluative skills necessary to the understanding of politics. Among the techniques to be considered are surveys, charts and graphs, case studies, and statistical summaries.

**238. Fundamentals of Political Behavior (3)** Interpretation of the basic concepts relative to American political behavior. Focus on political ideology, political culture, including political socialization, and both individual and group political behavior.

**300. Introduction to Political Theory (3)** A survey of various concepts in western political philosophy such as political obligation, freedom, equality, justice, rights, authority, and power.

**301. Introduction to Political Science (3)** An introduction to ideas important in the study of politics. Topics include the concept of power and the nature of the state as seen in the ideologies of totalitarianism, fascism, socialism, communism, liberalism and pluralism.

**310. International Politics (3)** An introduction to the basic factors influencing nation-state behavior in the world: the nation-state system, nationalism and imperialism, national power, and the present world crisis. The role of the United States in the world community is emphasized.

**320. Comparative Politics (3)** An introduction to the analysis of the major types of political systems utilizing examples drawn from democratic, communist and underdeveloped nation-states. Problems, approaches and methods associated with the comparative field are emphasized.

**326. Middle East Politics (3)** Comparative study of political processes within Middle Eastern countries and their relations with other states, particularly the United States. Prerequisite: SGIS 201.

**327. East Asian Politics (3)** Comparative study of political processes within East Asian countries and their relations with other countries, particularly the United States. Prerequisite: SGIS 201.

**330. International Organizations (3)** An introduction to the structure and functions of international political and economic organizations. Particular attention is given to the United Nations and its specialized agencies and to emerging regional communities.

**340. United States Foreign Policy (3)** Formulation of American foreign policy, problems of security, trade and diplomacy. Policies related to specific nation-states and regions will be emphasized.

**350. Women and American Politics (3)** The participation of women in American political life and their influence in electoral politics and issue-based movements.

**360. American Political Parties (3)** The functions, history and future of political parties in the United States. Emphasis is on the development of political parties and the consequences of that development upon the party as an organization, the party as an electorate, and the party in the government.

**361. Political Behavior (3)** Political participation in the United States through such activities as interest groups, political protest, contacting officials, voting, running for office. Who participates and why, and the consequences of participation for policy decisions and for society are also examined.

**363. Southern Politics (3)** Selected political patterns and trends within the eleven states of the American South including historical developments since 1950.

**364. State and Local Government (3) (=SCRJ 364)** The institutions, functions, policy making processes, and politics of state and local governments including an examination of the relations between state and local government, and the relations between state and local government and the national government.

**365. Politics and Media (3) (=SJOU 365)** Interpretation of the pivotal role of media in contemporary American politics. Familiarizes the student with fundamental concepts regarding the pervasive role of media in how it shapes our life, political ideology, political culture and political behavior. Prerequisite: SGIS 201 or permission of instructor.

**370. Introduction to Public Administration (3) (=SCRJ 370)** The basic principles and theory of administrative structure, responsibility, and control in relation to policy making in the modern state.

**374. Introduction to Public Policy (3)** Social, political, and technical forces in policy making including various theories of public policy and inquires into selected policy areas.

Current policy issues are included and integrated into the larger theories of decision making.

**380. Environmental Policy (3)** An investigation of American national and international issues relating to the ecological basis of human living. Special attention is on environmental issue-areas including air, water, forests, soil erosion, and wildlife as well as the impact of population, the economy, and technology on the quality of the environment.

**385. American Political Thought (3)** A survey of American political theorists from the colonial period to the present with an examination of the social, cultural, historical and scientific developments that have contributed to the nature of American political thinking.

**386. Art and Politics (3)** A presentation of the connection between art and political thought. The course focuses on architecture, painting, and music as they express political values and attitudes. Prerequisite: SGIS 201.

**399. Independent Study (1-6)**

**400. Terrorism and Political Violence (3)** Forms, causes, and consequences of political violence with special attention to terrorism.

**403. History of Western Political Thought (3)** A survey of political theories propounded by western political philosophers from Plato to Nietzsche.

**420. Women and Politics: A Global Perspective (3)** Women's status and political activism around the globe. The focus is on similarities and differences and the bases for them. Prerequisite: SGIS 320 or consent of instructor.

**445. Public Policy Seminar: K-12 School Reform (3)** Examination of current K-12 school reform efforts as public policy initiatives. Analysis of various models and approaches as appropriate methods of stabilizing and changing public schools as institutions fundamental to American society.

**450. Constitutional Law (3)** The evolution of governmental powers focusing on the judiciary, the presidency, congress, the states, and intergovernmental relations.

**451. Civil Rights and Civil Liberties (3) (=SCRJ 451)** Freedom of religion, freedom of speech and association, due process, equal protection, and criminal procedure.

**452. The Judicial Process (3) (=SCRJ 452)** The growth of law, the lawmaking of the courts, the structure and organization of federal and state courts, the procedures involved in civil and criminal cases, and the problems and proposals for reform in the administration of justice.

**460. International Law (3)** History and basic principles of law among nation-states. Emphasis is upon the scope of international law and the extent to which law shapes the behavior of international actors.

**462. The Legislative Process (3)** Structure, organization, powers, functions and problems of legislative bodies.

**463. The American President (3)** The constitutional powers and political roles of the president with lesser emphasis upon state governors. Emphasis is placed on the chief executive and administration, executive relationships with legislatures, and party and popular leadership by the executive.

**491. Topics in Government and International Studies (1-3)** May be repeated once as topics change.

**495. Political Science Internship (1-6)** Supervised work experience in a political or governmental environment. A minimum of three hours work per week is required for each credit hour. Students are required to meet periodically with the supervising faculty member. Prerequisites: junior or senior standing and consent of the instructor. Students are limited to a maximum of six hours combined from SGIS 495 and 496.

**496. Public Administration Internship (1-6)** Supervised work experience in a public administration environment. A minimum of three hours work per week is required for each credit hour. Students are required to meet periodically with the supervising faculty member. Prerequisites: junior or senior standing and consent of the instructor. Students are limited to a maximum of six hours combined from SGIS 495 and 496.

**500. Senior Seminar (3)** Exploration, at an advanced level, of issues, topics and dilemmas in both the subject matter and the profession of political science with emphasis on research and oral presentation of research findings. The specific topics covered in the course vary. Prerequisites: 12 hours of SGIS at the 300-level or above, or consent of instructor.

**571. Public Financial Administration (3)** Principles and practices of financial administration including organization, budgeting, assessment, treasure management, and debt.

**572. Public Personnel Management (3)** Fundamental principles of personnel organization and administration, including an analysis of personnel techniques.

### **Healthcare Information Management and Systems (SHIM)**

**201. Understanding Healthcare Organizations (3)** Introduction to origins and evolution of current healthcare delivery systems and organizational structures, healthcare terminology and language structures, common usage, acronyms, and basic uses of information in a variety of healthcare settings. Topics also include introduction to levels of information users and information needs within a variety of healthcare organizations. Prerequisites: SCSC 138, SIMS 201, or consent of instructor.

**301. Healthcare Information Systems (3)** Introduction to healthcare information systems to include management and administration information systems, clinical information systems, business information systems, decision support, critical care applications, information systems in education, and emergent system applications. Particular emphasis is placed on automation required for the emerging "paperless" environment and computer-based records. Prerequisite: SHIM 201 or consent of instructor.

**302. Information Trends in Healthcare Systems (3)** Data, knowledge, and information structures, terminological control, index language functions, regulatory determinants of data collected/stored (ex. JCAHO/HIPPA, etc.), including study of language development in healthcare systems evolution. Prerequisite: SHIM 301 or consent of instructor.

**311. Organizational Issues in Healthcare Information Management (3)** Project planning, implementation, management, healthcare environment issues, change management. Special emphasis is placed on communication skill development necessary to enable the student to understand and address information needs of all levels of information users within and among healthcare institutions. Prerequisites: SHIM 302 and SSPH 448; or consent of instructor.

**412. Ethics and Risk Management in Healthcare Information Systems (3)** Selected ethical issues, confidentiality, preservation and conservation of sensitive data, data maintenance and integrity preservation. Prerequisites: SPHL 310 or 311 and SHIM 302.

**413. Network Applications for Healthcare Information Systems (3)** Understanding LAN/WAN uses and functions in healthcare systems. Students will explore various network applications in healthcare settings to include WAN utility, wireless LAN and Intranets. Also emphasized is the emergent nature of network applications in various healthcare systems. Prerequisites: SCSC 412 and SIMS 415.

**450. Healthcare Database Systems and Information Retrieval (3)** Database formats and structures, query techniques, document classification, managing large data collections, statistical applications in data management. Emphasis is placed on the discovery of methods to capture data is an important institutional resource through efficient management of databases and data repositories, and on the importance of data collections that provide accurate outcome assessment. Prerequisite: SIMS 521.

**496. Special Topics (3)** Study reflective of current issues/topics related to the field of healthcare information management. Topics might include (but are not limited to) emergent technology in healthcare settings such as user interface design, expert system evolution, virtual environments, soft computing/fuzzy logic applications, artificial intelligence. Topics chosen for study in a given semester will be determined by the state of the science at the

time of the offering. Prerequisite: Completion of 12 hours SHIM courses.

### Health Education (SHED)

**170. First Aid (3)** Instruction leading to basic certification in standard first aid and cardiopulmonary resuscitation. Discussion of HIV/AIDS and back injury prevention is also included.

**221. Lifelong Health and Wellness (3)** Wellness and fitness trends in America. Self-assessment of health status concepts, human sexuality, health promotion strategies (physical fitness, stress management, nutrition, weight control) and health maintenance of major life style diseases (Cardiovascular disease, cancer, diabetes mellitus, HIV, substance abuse).

**331. Health and Physical Education for the Elementary School Child (3)** Methods and materials for teaching health and physical education in the elementary school including integration and correlation of materials with other subjects at primary and intermediate grade levels.

**334. The School Health Program (3)** Methods of teaching health with special emphasis on the relationship of health to physical education. Health service, healthful school living, and method and materials of teaching health are included. Prerequisites: SHED 221 and SBIO 232.

**400. Wellness: Diagnosis and Prescription (3)** Assessment techniques, theoretical frameworks, and methodology used in the diagnosis of an individual's level of wellness. An interpretation of the diagnoses is used to develop individual programs.

### History (SHST)

**110. Introduction to American History (3)** The development of United States society from pre-Columbian times to the present, emphasizing the development of social, political, and economic institutions that have shaped contemporary society.

**111. Introduction to European History (3)** Changes, continuities, and characteristics of Europe with emphasis upon the period from the Renaissance to the present.

**112. An Introduction to Non-Western Civilizations (3)** A survey of the major developments and characteristics of non-western civilizations and cultures in Asia, Africa, and the Americas.

**198. Current History (1)** Major events in the news with emphasis on their historical context and likely long-range significance. May be taken up to three times for credit.

*Note: the prerequisite for all upper division history courses is any 100-level history course or the consent of the instructor.*

**300. Introduction to Historical Studies (3)** Methods of historical inquiry. Particular attention is given to primary and secondary sources, document analysis, citation methods, research paper skills, and historical writing.

**301. History of the United States to 1877 (3)** The indigenous peoples, the era of discovery, and the nation from Independence to the end of Reconstruction, emphasizing major political, economic, social, and intellectual developments.

**302. History of the United States since 1865 (3)** The rise of modern America after the Civil War, emphasizing the political, social, economic, and intellectual trends that contributed to the development of contemporary society.

**303. Early North America (3)** The history of North America from its earliest inhabitants, the exploration and colonization of North America through the end of the American Revolution. The subject matter includes Native American societies, background on the Europeans and Africans who would migrate to North America, the collision of cultures, family life and labor, colonial administration, international rivalries, and the move toward national independence in the British colonies.

**304. The United States from Independence to the Civil War (3)** The political, social, economic, geographic, and intellectual development of the United States from the end of the colonial period to the onset of the Civil War.

**305. Civil War and Reconstruction, 1860-1877 (3)** The political, social, military, and economic history of the war and the struggle to rebuild the nation in its aftermath.

**306. The Making of the Modern United States, 1877 to 1945 (3)** The transformation of modern America into an industrial giant and world power between the end of Reconstruction and the end of World War II, covering economic, social, political, intellectual, and cultural developments.

**307. United States History since 1945 (3)** The emergence of the United States as a global power since the end of World War II, and the political and social struggles in contemporary society.

**310. African-American History to 1865 (3)** The African background, origins of slavery, the rise of the free black community, and African Americans as actors in the political, economic, social, and cultural history of the United States to the end of the Civil War.

**311. African-American History since 1860 (3)** The African American role in the Civil War. Emancipation, Reconstruction, and the development of the black community since 1860. Major topics include African Americans' struggle for autonomy and equal rights in the political and economic arenas, the impact of race in American society, and the intellectual and cultural traditions of African Americans.

**312. American Military History (3)** United States involvement in armed conflicts from the colonial period to the present. Subjects covered include the evolution of warfare, the place of the military in society, and the development of professionalism in American forces.

**313. The Vietnam War (3)** The causes, major events, and impact of the Vietnam War viewed in a cross-cultural context.

**320. The South to 1865 (3)** The southern United States from the colonial era to the end of the Civil War, emphasizing the development of regionally distinct political, social, economic, and cultural characteristics and institutions.

**321. The South since 1865 (3)** The southern United States from the era of Reconstruction to the present. Topics include the tension between an increasingly national focus in economics and politics and the desire to maintain local social control. The question of the persistence of a southern identity is central.

**322. History of South Carolina, 1670 to the Present (3)** The origins and development of South Carolina from colonial times to the present with emphasis on the unique role the state has played in the nation's history.

**323. Our Past: Upstate History (3)** Local history, focusing on Greenville, Spartanburg, and Cherokee Counties. Public/applied history techniques and projects are included.

**330. Early Mediterranean Empires (3)** Peoples in trade, politics, culture, and society in the Mediterranean region through the rise of the Byzantine Empire. Significant attention is given to the Egyptian, Persian, and Byzantine Empires with the main emphasis on Greece and Rome.

**332. Renaissance and Reformation in Europe (3)** Economic, political, social and cultural developments in Italy in the fourteenth and fifteenth centuries; their spread north and collision with the new ideas released in the Protestant revolt of the sixteenth century. Significant attention is given to the religious wars of the late 1500s and early 1600s.

**333. Absolutism and Enlightenment in Europe (3)** Social, economic, intellectual, cultural and political transformation of Europe from Louise XIV to the French Revolution. Significant attention is given to Absolutism, Louise XIV, Peter the Great, Frederick the Great, Maria Theresa, Catherine the Great and the new ideas of the Enlightenment.

**335. Twentieth Century Eastern Europe (3)** Eastern Europe from Austro-Hungarian, Russian and German domination to present. Significant attention is paid to nationalism, national self-determination, World Wars I and II, economic and political struggles, communist domination, and independence.

**336. Nineteenth Century Europe (3)** Europe from the French Revolution to the end of the nineteenth century. Significant attention is paid to the French Revolution, the Napoleonic Era, industrial development and its consequences, new ideologies, imperialism, and the rise of Italy and Germany.

**337. Age of the World Wars (3)** World War I, the Inter-war years, and World War II. Particular attention is given to the causes and events of World War I, the Paris Peace Conference of 1919, the struggles of the Inter-war period, the rise of Adolf Hitler, and the causes and events of World War II.

**338. Europe's Cold War (3)** The Cold War experience in Europe from 1945 to the early 1990s, from a political, social, cultural, economic and military perspective. Significant attention is given to European recovery, the creation of the Soviet Bloc as well as its demise, and European unity.

**340. Germany since 1870 (3)** Cultural, political, intellectual and social impact of unification, World War I, the Weimar Republic, the Third Reich, East and West Germany, and reunification.

**341. History of Modern Russia (3)** Political, economic, social and cultural developments from the mid-nineteenth century through the present.

**347. Medieval Britain 1066-1399 (3)** Political, social, economic, religious, and intellectual development in Britain during the High Middle Ages, from the Norman Conquest to the fall of Richard II.

**348. Early Modern Britain 1399-1750 (3)** British social, political, religious, cultural, and economic development in the early modern period. Topics include Henry VIII, Bloody Mary, Elizabeth, the English Civil War and the Glorious Revolution.

**349. Modern Britain 1750-Present (3)** British social, political, religious, cultural and economic development in the modern period, including the rise of industrialization, imperialism, and the two World Wars.

**350. Genocides in Europe (3)** Causes, comparisons, and consequences of ethnic cleansing and genocide from the late nineteenth century through the present. Significant attention is paid to the Jewish Holocaust in World War II.

**351. Women in Early Modern Europe and America (3)** Changing notions of the female body and women's roles as lovers, housewives, mothers, philosophers, consumers, workers, saints and potential citizens in pre-industrial, commercial and early industrial Europe.

**352. Women in Modern Europe and America (3)** Industrialization, changing images of the female body, radical and reform movements, war, economic depression, citizenship, race, professionalization, women's unwaged as well as wage labor, and effect of occupational choice upon women's social roles.

**353. History of Science (3)** The development of natural philosophy from the ancient Greeks through the Scientific Revolution and Enlightenment to the rise of modern science.

**354. Birth of Europe 300-1000 (3)** European political, social, economic, religious, and intellectual development from the establishment of Christianity as an officially sanctioned religion to the dawn of the feudal age. Topics will include the Germanic kingdoms, Charlemagne's Empire and the Viking invasions.

**355. Medieval Civilization 1000-1400 (3)** European political, social, economic, religious, and intellectual development during the High Middle Ages. Topics will include feudalism, the Crusades, and the Black Death.

**360. Africa to 1800 (3)** Traditional culture, early civilizations, rise of Islam, Sudanic empires, and the slave trade era.

**361. Africa since 1800 (3)** Commercial and religious revolutions of the 19th century, partition, colonial rule, post-independence, and South Africa.

**370. History of China (3)** The cultural, economic, social, and political development of China with emphasis on the transformation of traditional Chinese society from 1644 to the present.

**371. History of Japan (3)** The cultural, economic, social, and political development of Japan with emphasis on the transformation of traditional Japanese society from 1600 to the present.

**372. History of India (3)** The cultural, economic, social, and political development of India with emphasis on Hindu and Islamic influences, the rise of nationalism during the period of British rule, and post-independence India.

**380. Latin American to 1830 (3)** Indigenous cultures, the Spanish and Portuguese presence in the Caribbean, South America and Mesoamerica through independence.

**381. Latin American since 1810(3)** Independence, the national period, the struggles for political stability and democracy and against militarism and authoritarianism, economic development, issues of ethnic identity and culture.

**390. Foundations of a Global Society to 1800 (3)** Early interaction among major world areas; the beginning of European maritime expansion in the fifteenth century; the establishment of colonial and commercial empires; the slave trade era; and the political, economic, and cultural consequences of these developments to the early nineteenth century.

**391. Emergence of a Global Society since 1800 (3)** Developments since the late eighteenth century, including the impact of population increase and migration, the imperial-

ism of the later nineteenth century and the nature and consequences of the colonial era that followed, the transition to independence, continuing technological innovation and the interconnectedness of the contemporary world.

### **399. Independent Study (1-6)**

**491. Topics in History (3)** Reading and research on selected historical subjects. Prerequisite: Any lower division history class or consent of instructor.

**492. Topics in United States History (3)** Reading and research on selected historical subjects related to the history of the United States. Prerequisite: U.S. history at the 300-level or consent of instructor.

**493. Topics in European History (3)** Reading and research on selected European subjects.

**494. Topics in Non-Western History (3)** Reading and research on selected Non-Western subjects.

**495. Topics in African-American History (3)** Reading and research on selected historical subjects related to the African-American experience. Prerequisite: SHST 310, SHST 311, or consent of instructor.

**496. Topics in Women's History (3)** Reading and research on selected subjects in women's history. Prerequisite: Any lower division history class or consent of instructor.

**500. Senior Seminar (3)** Exploration, at an advanced level, of issues, topics and dilemmas in both the subject matter and the profession of history with emphasis on research and oral presentation of research findings. The specific topics covered in the course vary. Prerequisite: 12 hours of SHST at the 300 level or above with a minimum grade of C, or consent of instructor.

### **Honors Courses (HONS)**

**101. First Year Honors Experience (3)** Study of a particular theme taught by faculty across disciplines. Intensive reading, writing, and research. Prerequisite: Admission to Honors Program as a first year student; or permission of director of honors program.

**102. Chancellor's Honors Seminar (1-3)** Study of a particular topic taught by the Chancellor or Executive Vice-Chancellor of Academic Affairs. Prerequisite: Admission to Honors Program or permission of director of honors program.

**301. Honors Colloquium Study (3)** Examination of a particular theme taught by faculty across disciplines. Intensive reading, writing, and research. Prerequisite: Admission to Honors Program as a sophomore, junior or transfer student; or permission of director of honors program.



**401. Honors Thesis (3)** Independent original scholarship completed under the supervision of an honors faculty member. Work completed is an original essay, annotated creative work or performance, scientific report, or other special project. One meeting hour per week and independent research. May be repeated for credit once. Prerequisite: Admission to Honors Program; 12 honors credits, permission of director of honors program.

### **Information Management and Systems (SIMS)**

**201. Concepts of Information Management and Systems (3)** Theoretical foundations of organization of information; cognitive structures and processing of data, information, knowledge, and understanding information uses and users. The integrated and interdisciplinary nature of information science and computer science is introduced and developed through case studies and examples from concentration disciplines: business, education, communication, and healthcare settings. Prerequisite: SCSC 138.

**211. Microcomputer Organization (3)** Introduction to the major features of operating system software, the primary functions of CPU's, bus architectures, secondary storage devices, peripheral devices, hardware and software configuration. The goal is the assembly and disassembly of microcomputer systems and installation of operating systems, network operating systems, and applications software. Prerequisite: SCSC 139.

**345. Technical Presentation and Communication (3)** Communication technologies in the workplace such as Power Point, Lotus, Freelance and HTML. Prerequisites: SCSC 138 and SSPH 201.

**346. Communication and New Technology (3)** Understanding the components of various technologies and their importance in information management and dissemination within and outside the organization. Prerequisite: SCSC 138.

**415. Wide Area Networks and the Internet (3)** Concepts of digital data communication techniques, telecommunication standards, data transmission, security, routing and switching, transport protocols, WAN design and management, internetworking, and trends. Prerequisites: SCSC 412 or consent of instructor.

**421. Database Applications and Implementation (3)** Introduction to databased implementation and a set theoretic data model, including applications development and the use of development tools for constructing applications on various databased platforms. Prerequisite: SCSC 242 or SIMS 239.

**498. Experiential Learning in Information Management and Systems (3)** The application of learning in a professional setting. To complement and strengthen the Information Management and Systems academic program, students will complete a planned program of observation,

study, and work in selected organizations with information management and systems offices. Student will have an opportunity to apply and articulate what they have learned in the classroom. Prerequisites: IMS major, senior standing and approval of instructor. Pass/fail credit.

**499. Senior Seminar in Information Management and Systems (3)** Integration of knowledge in information management and systems. Students will study and evaluate current innovations in technology and current applications of these systems. Case studies involving information systems technology will be used. Students will research and present new trends in technology. Students will experience an intensive and practice exercise in scholarship production. Class discussion will foster effective and creative implementation of research strategies, writing abilities, documentation procedures, portfolio development, and presentational skills.

### **Journalism (SJOU)**

**301. Survey of Mass Communications (3)** Survey of the principles, philosophies, policies and practices of the mass media with an overview of the print media, the broadcast media, and advertising/public relations. Prerequisite: SEGL 102.

**302. History of Journalism (3)** The development of mass media from the colonization of America to the present. The interrelationships between print media and American social, cultural, economic and political issues are explored, with some examination of how these interrelationships influenced the development of twentieth century non-print media. Prerequisite: SEGL 102.

**303. Law and Ethics of the Mass Media (3)** South Carolina and federal law relating to mass communications, the Internet, and the ethics of the journalistic profession. Prerequisite: SJOU 301 or consent of instructor.

**304. Writing for the Media (3)** Writing for print, broadcasting, public relations, the Internet, both news and non-news. Using word processors, students prepare exercise and copy both in class and out of class on set deadlines. Prerequisite: SEGL 101.

**305. Mass Communication Theory (3)** The role of communication models such as the social learning theory, agenda setting, and cultivation theory in explaining the processes and effects of mass communications. Prerequisite: SEGL 102.

**310. Mass Media and Society (3)** How mass media function and influence today's world. The interaction of mass media and contemporary culture is explored through an analysis of media examples. Prerequisite: SEGL 102.

**325. Speech for Radio and Television (3)** Principles, standards and skills for broadcast speech in varied formats. Focus areas include pronunciation, enunciation, rate of

delivery, pitch, inflection, and use of appropriate terminology in scripted and ad lib delivery. Prerequisites: SSPH 201 and 340.

**326. Motion Picture and Video Techniques (3)** Production techniques used in preparing film and videotape. Prerequisite: SJOU 301.

**328. Public Relations and Persuasion (3)** An analysis of the influencing of public opinion by business, government, consumer groups, minorities, environmentalists, and others. Prerequisite: SEGL 102.

**333. Newswriting and Reporting (3)** Practices in print journalism. Using typewriters or word processors, students prepare copy in class against set deadlines. Prerequisites: SJOU 301 or consent of instructor.

**334. Writing for Broadcasting (3)** Writing commercials, news stories, interview programs, documentaries for radio, television and film. Using word processors, students prepare copy in class against deadlines. Prerequisites: SJOU 301 or consent of instructor, and typing proficiency.

**335. Feature Writing (3)** Focus on producing specialized articles on topics selected from such areas a public or community affairs, business, entertainment, science, sports, medicine and education. Using word processors, students prepare copy in class against set deadlines. Prerequisite: SJOU 301 or consent of instructor.

**360. Film Directors (3)** Screening and analysis of feature-length films from the works of an individual director or a small group of directors. Analysis will involve subject matter, themes, and content as well as technical choices and style, marketing, distribution, and reception of the motion pictures. Prerequisite: SEGL 102.

**398. Special Topics in Journalism (3)** A specific area or media field is explored relating to the professional responsibilities of the journalism student looking toward the career marketplace. Prerequisite: SJOU 301.

**424. History of American Broadcasting (3)** The American system of broadcasting, with emphasis on the chronological, structural, economic, social, and cultural development of radio and television. Prerequisite: SEGL 102.

**425. History of Film (3)** The motion picture industry from the silent era to the present. American and foreign films and film clips will be analyzed to emphasize chronological, technical, structural, economic, thematic and cultural connections. Prerequisite: SEGL 102.

**426. Advanced Video Production (3)** Crew assignments during on-air taping and independent group projects involving pre-production, production, and post-production. "Hands on" experience will be augmented by demonstrations, lectures, and readings. This course will be held in the

WRET studio in the USC UpstateMedia Building. Prerequisite: SJOU 326 or previous video or photography experience and permission of Chair, Fine Arts, Languages, & Literature.

**430. Media Management (3)** Procedures, problems, and concerns relating to the administration and management of media agencies--print, broadcast, advertising, and public relations. Prerequisite: SEGL 102.

**480. Minorities in the Media (3)** An examination of media's depiction of groups that are marginalized based on race, class and/or gender. The interactions and relationships among professional terminology, cultural implications, message construction, media analysis and community perceptions are explored. Prerequisite: SEGL 102.

### Logic (SLGC)

**205. Introduction to Logic and Rhetoric (3) (= University 301)** The identification and evaluation of reasoning as it occurs in natural language uses. The techniques of careful reading and clear writing are demonstrated through the production of critical essays. Two lecture and one laboratory hour per week. Prerequisite: SEGL 102.

**207. Deductive Logic (3)** An examination of deductive arguments through the use of Aristotelian logic and propositional logic.

**208. Inductive Logic (3)** The nature of arguments expressing inductive inferences. Included are the problem of induction, the probability calculus, the logic of experimentation, statistical inference, and decision-making models. Prerequisite: SLGC 205 or consent of instructor.

**307. Advanced Symbolic Logic (3)** Advanced study of formal logic using propositional logic and predicate calculus. Prerequisite: SLGC 207 or consent of instructor.

### Mathematics (SMTH)

*Note: The appropriate entry level in mathematics is determined by the student's intended major and a mathematics placement examination given to all entering freshmen. Placement testing is also required for transfer students who have not completed their general education mathematics requirements.*

*Majors in the natural or computer sciences or mathematics who have completed three years of college preparatory mathematics and have demonstrated competence on the mathematics placement examination; should enroll in Mathematics 121, 126 or 127 as appropriate. Students who need both college algebra and trigonometry have the option of taking Mathematics 121 (with a grade of B or better) or 126, and Mathematics 127. Those who have demonstrated competence in college algebra can take Mathematics 127 to meet the calculus prerequisite. Upon successful completion of one of the*

*precalculus options, students should enroll in Mathematics 143. Those who have completed four years of college preparatory mathematics, including trigonometry, and have demonstrated competence on the mathematics placement examination, should enroll in Mathematics 143.*

*Students not majoring in the natural or computer sciences, who have successfully completed high school Algebra I and II, and have demonstrated competence on the mathematics placement examination, should enroll as follows: business administration majors in the Mathematics 121, 122 sequence; elementary, early childhood, and special education majors in Mathematics 121, and 231; other majors in a mathematics course determined by their advisors.*

**102. Elementary Statistics (3)** The fundamentals of modern statistical methods, descriptive and inferential statistics, probability and sampling; primarily for students in fields other than mathematics who need a working knowledge of statistics. Prerequisites: high school Algebra I and II, or equivalent.

**120. College Mathematics (3)** Linear equations and inequalities, exponential equations, mathematics of finance, fundamental set theory, fundamentals of probability and statistics. This course may not be used to satisfy any prerequisite requirement for higher-numbered mathematics courses. Prerequisites: appropriate score on placement test and high school Algebra I and II.

**121. College Algebra (3)** Equations and inequalities, graphing, polynomial, rational, exponential, logarithmic, and other functions; matrices and systems of equations. Only one of SMTH 121 and 126 may be used to satisfy a mathematics requirement for general education or major credit. Prerequisites: appropriate score on placement test and high school Algebra I and II. For students who need a more intensive study, an expanded version of college algebra (SMTH 121A) is available. SMTH 121A is open to students who have an appropriate score on the placement test, have completed SMTH 120 with the mandatory lab, or if the student, in consultation with his or her advisor, determines that extra instruction is needed in order to succeed in SMTH 121.

**122. Calculus for Management and Social Sciences (3)** Derivatives and integrals of elementary algebraic, exponential and logarithmic functions; maxima, minima, rate of change, area under a curve, and volume. Problems and examples are drawn from a variety of areas which include economics, psychology, biology, geography, and geology. Prerequisite: SMTH 121, 126 or eligibility for exemption from SMTH 121.

**126. Precalculus I (3)** Subsets of the real number line; polynomial, rational, absolute value, exponential and logarithmic relations and functions. Only one of SMTH 121 and 126 may be used to satisfy a mathematics requirement for general education or major credit. Prerequisites: appropriate score on placement test and three years of college preparatory mathematics; or a "C" or better in Mathematics 099 and three years of college preparatory mathematics.

**127. Precalculus II (3)** Trigonometric functions, trigonometric identities, solution of equations and triangles, inverse trigonometric functions, vectors, polar coordinates; analytic geometry. Prerequisite: appropriate score on placement exam or consent of instructor. Prerequisite or Corequisite: SMTH 126.

**143. Calculus I (3)** Brief review of real numbers, sets, inequalities, absolute value, elementary analytic geometry; functions, limits, continuity, the derivative, and differentiation with applications in the natural sciences and engineering. Prerequisites: appropriate score on placement test and four years of college preparatory mathematics including trigonometry; or SMTH 126 and 127.

**144. Calculus II (3)** Definite and indefinite integrals, techniques of integration, and application of integration. Prerequisite: SMTH 143.

**174. Elements of Discrete Mathematics (3)** Basic topics from the study of matrices, combinatorics, recursion, graphs, trees, finite automata, Boolean algebra, and formal languages. Prerequisite: high school precalculus mathematics, or SMTH 126 or equivalent, or consent of the instructor.

**198. Seminar in Strategies of Problem Solving (1)** An introduction to mathematical probing and experimentation in problem solving; the principle of mathematical induction, various strategies of problem solving emphasizing analysis, exploration and verification of results. Attention is also given to the language and logic necessary for the communication of the solution of a problem. Prerequisite or corequisite: SMTH 143.

**202. Elementary Statistics II (3)** An expansion of topics taught in the first semester of elementary statistics such as hypothesis testing; inferences; correlation and regression. Additional topics to be covered include: multinomial experiments and contingency tables; analysis of variance; statistical process control; and individual projects. Prerequisites: SMTH 201, or SECO 291, or SSOC 201, or SPSY 225.

**231. Basic Concepts of Elementary Mathematics I (3)** The meaning of number, fundamental operations of arithmetic, the structure of the real number system and its subsystems, elementary number theory. Open only to students in early childhood, elementary, middle grades, or special education. Prerequisite: Grade of C or better in SMTH 121 or higher, not including statistics, or consent of the instructor.

**232. Basic Concepts of Elementary Mathematics II (3)** A continuation of the development of the real number system and its subsystems, basic concepts of probability, and elementary data analysis. Open only to students in early childhood, elementary, middle grades, or special education. Prerequisite: Grade of C or better in SMTH 231 or consent of the instructor.

**233. Geometry and Measurement (3)** A study of properties and relationships of shape, size, and symmetry in two and three dimensions; explorations of concepts of motion in two and three dimensions through transformations. Open only to students in early childhood, elementary, middle grades, or special education. Prerequisite: SMTH 231 or higher with a grade of C or better, or consent of the instructor.

**243. Calculus III (3)** Improper integrals, parametric equations, polar coordinates, infinite sequences and series, and differential equations. Prerequisite: SMTH 144.

**244. Calculus IV (3)** Geometry of three-dimensional space, vectors, partial differentiation, cylindrical and spherical coordinates, and multiple integration. Prerequisite: SMTH 243.

**245. Elementary Differential Equations (3)** Ordinary differential equations of first order, higher order linear equations, Laplace transform methods, series methods; numerical solutions of differential equations; applications to the physical sciences and engineering. Prerequisite: SMTH 243.

**315. Statistical Methods I (3)** Concepts and methods of statistics with emphasis on applications for those who desire a working knowledge of statistics; review of probability, sampling, and descriptive statistics; study of estimation of population parameters, testing statistical hypotheses, regression and correlation, and non-parametric statistical tests. Prerequisite: SMTH 201 or 143, or SECO 291, or SSOC 201, or SPSY 225, or consent of the instructor.

**320. Mathematical Modeling (3)** Graphs of functions as models, modeling using proportionality and geometric similarity, model fitting and models requiring optimization, experimental modeling, modeling using the derivative and interactive dynamic systems. Prerequisite: SMTH 144.

**340. Mathematical Structures and Proof (3)** Topics in set theory, logic, elementary application of logic, methods of mathematical proofs, equivalence relations and partial orderings, functions and mappings, and number systems. Prerequisite or Corequisite: SMTH 243.

**344. Matrix Algebra (3)** Matrices, systems of linear equations, vectors, Euclidean vector spaces, linear transformations, eigenvalues and eigenvectors. Prerequisites: SMTH 144 or consent of instructor.

**346. Introduction to Modern Algebra (3)** Introduction to groups, rings and fields. Topics covered include permutations, Lagranges' theorem, the fundamental homomorphism theorem, Cayley's theorem, polynomial rings, and Abelian groups. Prerequisites: SMTH 340 or consent of instructor.

**354. Real Analysis I (3)** Ordered field properties of the real number system; completeness; theory of limits of se-

quences, series and functions; continuity (including uniform continuity); introduction to theory of the derivative. Prerequisites: SMTH 340, or SMTH 243 and consent of instructor.

**374. Theory of Discrete Mathematics (3)** Topics selected from theoretical Boolean algebra, algebraic structures, theory of computing, advanced set theory, and recursive functions. Prerequisites: SMTH 243, or both 144 and 174, or consent of the instructor.

### **399. Independent Study (1-9)**

**501. History of Mathematics (3)** A survey of the major developments and procedures of mathematics, from its origins to the modern era, relating development with the diverse cultures and the aspects of mathematics they contributed. Prerequisites: SMTH 144 or consent of instructor.

**512. Probability and Statistics (3)** Sample spaces and probability, conditional probability and independence, discrete and continuous random variables, probability distributions, expectations, correlation, sampling and sampling distributions, interval and point estimation, the law of large numbers, limiting distributions, and order statistics. Prerequisite: SMTH 244 or consent of the instructor.

**516. Statistical Methods II (3)** Experimental design, analysis of variance, analysis of covariance, multiple linear regression, and curvilinear regression. Prerequisite: SMTH 315 or consent of the instructor.

**531. Foundations of Geometry (3)** Geometry as a logical system based upon postulates and undefined terms; fundamental concepts and relations of Euclidean geometry developed rigorously on the basis of a set of postulates; some topics from non-Euclidean geometry. Prerequisite: SMTH 340 or consent of the instructor.

**544. Linear Algebra (3)** Vector spaces, and subspaces; bases and dimension; change of basis; linear transformations and their matrices; diagonalization; canonical forms; bilinear forms; eigenspaces. Prerequisite: SMTH 340, SMTH 344.

**546. Algebraic Structures (3)** Advanced topics in groups, rings and fields. These topics include polynomial rings, ideals, integral domains, extension field, isomorphism theorems for groups, and p-groups. Prerequisite: SMTH 346.

**552. Complex Variables (3)** Complex numbers and functions, complex integration, Taylor and Laurent series, residues, and conformal mapping. Prerequisite: SMTH 340 or consent of the instructor.

**554. Real Analysis II (3)** Further development of the theory of differential and integral calculus including properties of the derivative and integral, Fundamental Theorem of Calculus, sequences and series of functions. Prerequisite: SMTH 354.

**560. Numerical Analysis I (3) (=SCSC 560)** Difference calculus; direct and iterative techniques for matrix inversion; eigenvalue problems; numerical solutions of initial value problems in ordinary differential equations; stability; error analysis; laboratory applications. Prerequisites: SMTH 245, 344 and programming competency.

**598. Topics in Mathematics (3)** Intensive study in an area of pure or applied mathematics such as mathematical modeling. Topics are selected to meet current faculty and student interest. Prerequisite: SMTH 243 and consent of the instructor.

**599. Seminar in Mathematics (3)** Recent developments in pure and applied mathematics at an advanced level; ethical issues; and experience in research and oral presentation. Prerequisite: Senior Standing. Prerequisites or corequisites: SMTH 344, SMTH 346, and either SMTH 315 or SMTH 512.

### **Military Science (SMIL)**

*Note: Military Science offers a Basic Program and Advanced Program. There are no prerequisites for the courses offered under the Basic Program. Courses may be taken in any order, but it is recommended that the 100 level courses be taken prior to the 200 level courses. Prerequisites for entering the Advanced Program include one of the following: satisfactory completion of six semester hours in the Basic Program, 90 contact hours in ROTC activities, substitute military experience (Basic Training/Advanced Individual Training), or three years of JROTC. Successful completion of the Advanced Program, together with a college degree, qualifies the graduate for either a Reserve or Regular Army Commission as a Second Lieutenant in the U.S. Army. Advanced Program students are required to participate in the weekly Military Science Lab. Students in the basic program are encouraged to participate in the department's adventure training.*

### **Basic Program**

**111. Introduction to Military Leadership I (1)** Basic orientation to ROTC and the U.S. Army. Topics include leadership, the role and structure of the Army, military customs and courtesies, basic marksmanship and map reading. Leadership labs are optional.

**112. Introduction to Military Leadership II (1)** Basic orientation to ROTC and the U.S. Army. Topics include leadership, map reading, land navigation, and development of skills to work effectively as a member of a team. Leadership labs are optional.

**211. Basic Military Leadership I (2)** Basic leadership training. Topics include basic principles of effective leadership, leadership behaviors and attributes, basic survival skills, basic individual soldier skills and land navigation. Laboratory optional.

**212. Basic Military Leadership II (2)** Effective leadership and development. Topics include Army values and ethics, the principles of war, principle-centered leadership, troop-leading procedures, problem-solving techniques, individual

tactical skills and orientating. One leadership laboratory is required.

### **Advanced Program**

**301. Intermediate Military Leadership I (3)** Comprehensive instruction in leadership and management skills. Topics include map reading and land navigation, squad and platoon tactics, first aid and communications. Two weekend leadership labs are required. Prerequisite: six semester hours in the Basic Program, or 90 contact hours in ROTC activities, or substitute military experience, or three years of JROTC.

**302. Intermediate Military Leadership II (3)** Development of basic military skills for Advanced Camp at Fort Lewis, Washington. Instruction includes offensive and defensive squad tactics, operations orders, and military briefings. Two weekend leadership laboratories are required. Prerequisite: SMIL 301.

**401. Advanced Military Leadership I (3)** Comprehensive instruction on leadership, principles of war, the law of war, military ethics, and professionalism, including challenges and global threats to the U.S. Two weekend leadership laboratories are required. Prerequisite: SMIL 302 and successful completion of ROTC Advanced Camp.

**402. Advanced Military Leadership II (3)** Orientation to Army logistics and personnel management. Topics include military justice, Army training management, Army battle doctrine, and the transition from student to officer. Students plan and conduct required leadership laboratories. Two weekend leadership laboratories are required. Prerequisite: SMIL 401.

### **Music Education (SMUE)**

**354. Music for Elementary and Middle Schools (3)** The integration of music into the elementary and middle school curriculum. An holistic approach to music as personal expression, aesthetic perception, critical analysis, and music as it influences cultural heritage.

### **Music History and Literature (SMUS)**

**110. Introduction to Music (3)** Comprehensive appreciation of music through intelligent listening to representative masterpieces of the various periods of musical composition. No previous study of music is required. Three class hours per week.

*Note: Credits for participation in Jazz Band, Gospel Music Workshop, University Singers, and/or Contemporary Music Workshop may be counted up to a maximum of four semester hours as applicable to the student's program of study.*

**125. Music Theory (3)** Materials of music including basic elements through triads, seventh chords, and modulation. Exercises in writing and analysis of music with emphasis on common practice.

**127. Jazz Band (1)** Rehearsal and performance of jazz literature. Prerequisite: Basic music reading skills and performance ability commensurate with music to be performed. Auditions may be required. May be repeated for additional credit.

**128. Gospel Music Workshop (1)** The directed performance of traditional and contemporary gospel music. No audition or prior experience is necessary.

**129. University Singers (1)** Performing chorus for men and women. No previous experience required.

**130A. Applied Music in Bass (1)** Individual study in bass performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of Instructor. Auditions may be required. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130B. Applied Music in Trombone (1)** Individual study in trombone performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of Instructor. Auditions may be required. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130D. Applied Music in Percussion (1)** Individual study in percussion performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of Instructor. Auditions may be required. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130G. Applied Music in Guitar (1)** Individual study in guitar performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Performance ability commensurate with music to be performed and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130T. Applied Music in Trumpet (1)** Individual study in trumpet performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of Instructor. Auditions may be required. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130P. Applied Music in Piano (1)** Individual study in piano performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of instructor. Auditions may be required. PLEASE NOTE:

*Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130S. Applied Music in Saxophone (1)** Individual study in saxophone performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of instructor. Auditions may be required. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**130V. Applied Music in Voice (1)** Individual study in voice performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Consent of instructor. Auditions may be required. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**155, 156, 255, 256. Group Piano (2,2,2,2)** Piano technique including sight-reading, rhythmic studies, and piano literature from simple to advanced. The individual needs of students are considered in the levels of materials studied and performed.

**165, 166, 265, 266. Class Voice (2,2,2,2)** Vocal technique including tone production, diaphragmatic breathing, technical studies, and song literature. The individual needs of students are considered in the levels of material assigned and performed. Corequisite: SMUS 129.

**265, 266. Class Voice (2,2)** Vocal techniques including tone production, diaphragmatic breathing, technical studies, and song literature. The individual needs of students are considered in the level of material assigned and performed. Corequisite: SMUS 129.

**310. Jazz History (3)** Origin, development, and styles of jazz music and its exponents. Cultivation of special listening techniques. Prerequisite: SEGL 102.

**325. Jazz Theory (3)** Technical aspects of jazz improvisation including harmonic substitutions, chord/scale relationships, analysis of harmonic progressions and solos, forms, piano voicings, and ear training. Prerequisite: Basic music reading ability.

**327. Jazz Band (1)** Rehearsal and performance of jazz literature. Prerequisite: Intermediate music reading, performance ability commensurate with music to be performed, and consent of instructor. Auditions may be required. May be repeated for additional credit. Intended for students pursuing a Jazz Studies minor.

**330A. Applied Music in Bass (1)** Individual study in bass performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330B. Applied Music in Trombone (1)** Individual study in trombone performance requiring weekly 30-minute lessons for twelve weeks and additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330D. Applied Music in Percussion (1)** Individual study in percussion performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330G. Applied Music in Guitar (1)** Individual study in guitar performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330P. Applied Music in Piano (1)** Individual study in piano performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330S. Applied Music in Saxophone (1)** Individual study in saxophone performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330T. Applied Music in Trumpet (1)** Individual study in trumpet performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**330V Applied Music in Voice (1)** Individual study in voice performance requiring weekly 30-minute lessons for twelve weeks and an additional four hours per week of practice. An

additional fee is assessed. Prerequisite: Intermediate to advanced performance ability and consent of instructor. Auditions may be required. May be repeated for additional credit. PLEASE NOTE: *Students who withdraw from this course will not receive a tuition or fee reimbursement or refund.*

**345. Jazz Improvisation I (3)** Principles of improvisation including idiomatic chord progressions, blues scales, patterns, melodic development, and tune styles. This is primarily a lecture class; however, students may be required to demonstrate improvisational skills on their instrument. Prerequisite: SMUS 325 or consent of instructor.

**346. Jazz Improvisation II (3)** Advanced principles of improvisation including idiomatic chord progressions, formal analysis of tunes, modal scales, melodic development, and aural skills. This is primarily a lecture class; however, students may be required to demonstrate improvisational skills on their instrument. Prerequisite: SMUS 345 or consent of instructor.

**398. Selected Topics in Music (3)** Reading and research on selected topics in music. Prerequisite: SEGL 102

#### **Nonprofit Administration (SNPA)**

**201. American Humanics Workshop (1)** Application of nonprofit management principles through active participation in a student organization. May be repeated for a maximum of four semester hours.

**301. The Nonprofit Sector in the United States (3)** The importance of the nonprofit sector in the United States emphasizing the history, the relationship to business and government and the place of the nonprofit sector within American society generally. Prerequisite: Sophomore standing (30 semester hours).

**302. Nonprofit Administration (3)** The fundamentals of nonprofit administration to include leadership, legal foundations, board development, the role of volunteers, nonprofit advocacy and ethics.

**303. Nonprofit Financial Administration (3)** Financial management within the nonprofit sector emphasizing strategic planning, budgeting, accountability, risk management and control. Prerequisite: SNPA 302 or consent of instructor.

**304. Fund Raising for Nonprofit Organizations (3)** Fundamentals of resource development in the nonprofit sector including strategic planning, principles of philanthropy, proposal writing, event planning, and charitable trusts. Prerequisite: SNPA 302 or consent of instructor.

**399. Independent Study (1-4)** An individualized, contracted program of study planned in conjunction with a faculty member. Prerequisites: SNPA 301 and consent of instructor.

**495. Nonprofit Senior Seminar (3)** A capstone course in nonprofit administration emphasizing research and oral presentations. Prerequisites: SNPA 301, SNPA 302, SNPA 303, SNPA 499.

**499. Nonprofit Internship (1-6)** Supervised work experience in a nonprofit organization. Forty-five hours of work for each credit hour are required. Prerequisites: SNPA 301, junior or senior standing and consent of instructor.

### **Nursing (SNUR)**

*Note: SNUR 301 and SNUR 302 are open to all students.*

**301. Nutrition (3)** Nutritional needs across the life span and related strategies for promotion and maintenance of health. Concepts include nutrients, food groups, nutritional guidelines, sociocultural influences, nutritional assessment, basic nutritional counseling, and common diet modifications. Prerequisites: SBIO 242 or consent of instructor.

**302. Pharmacology (3)** Concepts underlying the pharmacotherapeutics of major drug classifications, including pharmacokinetics, pharmacodynamics, adverse drug reactions, and fundamental nursing decision making situations as related to pharmacology. Drug dosage computation is included. Prerequisite: SBIO 242 or consent of instructor.

**399. Nursing Externship (3-8)** A concentrated preceptored experience in nursing enabling the student to expand previous clinical practice experiences and further develop skills in clinical reasoning, critical thinking, organization, and prioritization. For three externship credit hours, a minimum of 135 hours of scheduled clinical experiences, weekly seminars, and consultation with the instructor are required. A minimum of 45 hours for each additional credit hour is required. A student may repeat SNUR 399 once in a different clinical setting for a total of not more than eight hours of undergraduate credit. Prerequisites: SBSN 331, 331L, 341, 341L, or SANU 104, 104P, 103L. Pass/fail credit.

### **Baccalaureate Nursing (SBSN)**

**305. Health Promotion Across the Life Span (3)** Introduction to leading health indicators, emphasizing special health concerns based on gender, age, race, ethnic, origin in assisting self, individuals, and family to attain optimum health. Prerequisite: Completion of 6 hours in Group IV General Education Requirement, with a minimum grade of C in each course.

**306. Introduction to Professional Nursing (3)** Concepts and theories that have shaped professional nursing practice. Prerequisite: Admission to the Baccalaureate Nursing Program, Four-Year track. Prerequisite or Corequisite: SBSN 305.

**310. Health Assessment (2)** Comprehensive health assessment of well individual clients across the life span. Emphasis is on data collection as a basis for critical thinking in nursing practice. For Four-Year track, Prerequisite:

Admission to Baccalaureate Nursing Program; Prerequisite or Corequisite: SBSN 305, 306; Corequisites: SBSN 310P, 320P, 325P. For RN Completion track, Prerequisite: Admission to Baccalaureate Nursing Program, or consent of instructor; Corequisite: SBSN 301P.

**310P. Health Assessment Practicum (1)** Practice of concepts and skills used in comprehensive health assessment of well individual clients across the life span. Two campus laboratory hours per week. Corequisite: SBSN 310.

**311. Basic Nursing Practice (4)** Principles, concepts, and skills essential for application of the nursing process to assist adult client systems, having common health disequilibriums, to meet their basic needs. Prerequisite or corequisite: SNUR 301, 302, SBSN 310, 310L. Corequisite: SBSN 311L.

**311L. Basic Nursing Practicum (4)** Application of nursing process with adult client systems, having common health disequilibriums, utilizing basic principles, concepts, and skills. Campus laboratories provide for acquisition of knowledge and psychomotor skills, while selected health care settings provide for the application of knowledge and skills to implement basic nursing care. Eight laboratory hours per week. Corequisite: SBSN 311.

**320P. Foundations of Nursing Practicum (3)** Application of knowledge and skills to implement basic nursing care. Practicum experiences provide for application of cognitive and psychomotor skills. Six practicum hours per week. Prerequisite: Admission to the Baccalaureate Nursing Program, Four-Year track; Prerequisites or Corequisites: SBSN 305, 306; Corequisites: SBSN 310, 310P, 325P.

**325P. Integrated Nursing Practicum (3)** Implementation of nursing process in health care environments for beginning integration of nursing knowledge and skills from health promotion, health assessment, nursing foundations, and introduction to professional nursing. Six practicum hours per week. Prerequisites or Corequisites: SBSN 305, 306; Corequisites: SBSN 310, 310P, 320P.

**330. Health Alterations I (3)** Evidence-based nursing practice with adults experiencing health alterations, moving from simple to complex states of health and levels of care. Prerequisites: SBSN 310, 310P, 320P, 325P. Corequisite: SBSN 330P.

**330P. Health Alterations I Practicum (2)** Implementation of evidence-based nursing practice, progressing in complexity, in a variety of settings with adults experiencing health alterations. Four practicum hours per week. Corequisite: SBSN 330.

**331. Nursing of Adults (4)** Use of nursing process with adult client systems having selected acute and chronic physiological disequilibriums. Prerequisite: SNUR 301, 302, SBSN 310, 310L, 311, 311L.



**331L. Nursing of Adults Practicum (4)** Application of nursing process with adult client systems, having acute or chronic physiological disequilibriums, in selected health care settings. Eight laboratory hours per week. Corequisite: SBSN331.

**340. Nursing of Childbearing Families and Women's Health (3)** Evidence-based nursing practice for women and parent-newborn dyad. Focus is on nursing interventions that promote, maintain and restore health of well and high-risk families during the childbearing process and women's health throughout the life span. Prerequisites or Corequisites: SBSN 330, 330P; Corequisite: SBSN 340P.

**340P. Nursing of Childbearing Families and Women's Health Practicum (2)** Implementation of concepts and skills to provide for families throughout the childbearing process and women throughout their life span. Practica are in traditional and non-traditional facilities. Four practicum hours per week. Corequisite: SBSN 340.

**341. Nursing of Childbearing and Childrearing Families (4)** Use of nursing process to assist parent, child, and family systems to achieve and/or maintain dynamic health equilibrium. Prerequisite: SNUR 301, 302, SBSN 310, 310L, 311, 311L. Corequisite: SBSN 341L.

**341L. Nursing of Childbearing and Childrearing Families Practicum (4)** Application of nursing process with parent, child, and family systems in selected health care settings. Eight laboratory hours per week. Corequisite: SBSN 341.

**350. Professional Nursing Role Transition (3)** Theories of nursing, systems, family, teaching-learning, practice, education, role and change that are central to current professional nursing practice. Prerequisite: Admission to the RN-completion track. Corequisite: SBSN 350S.

**350S. Professional Nursing Role Transition Seminar (2)** Web-based seminar focusing on role development in health promotion strategies and technology including development of teaching plans, plans of care, and family assessment. Prerequisite: Admission to the RN-completion track. Corequisite: SBSN 350.

**360. Child Health Nursing (3)** Evidence-based nursing practice for children. Emphasis is on health promotion, maintenance, and restoration, using a family-centered approach. Prerequisites or Corequisites: SBSN 330, 330P; Corequisite: SBSN 360P.

**360P. Child Health Nursing Practicum (2)** Implementation of evidence-based nursing practice for children and their families, in both acute care and community settings. Four practicum hours per week. Corequisite: SBSN 360.

**370. Nursing Research (3)** Introduction to the language and underlying concepts as a basis for reading, under-

standing, and utilizing research as a source of evidence for guiding practice. For the Four-Year track, Prerequisites: SBSN 310, 310P, 320P, 325P. For RN Completion track, Prerequisite: SBSN 350, or consent of instructor.

**399. Independent Study (1-3)** An individual learning experience in an area of special interest planned in conjunction with a nursing faculty member. For Four-Year track, Prerequisites: SBSN 330, 330P, 340, 340P, 360, 360P; or consent of instructor. For RN Completion track, Prerequisite: SBSN 350; or consent of instructor.

**410. Health Alterations II (3)** Builds upon Health Alterations I and continues to focus on evidence-based nursing practice, progressing in complexity, in a variety of settings with adults experiencing health alterations, moving from simple to complex states of health and levels of care. Six practicum hours per week. Prerequisites: SBSN 330, 330P, 340, 340P, 360, 360P, 370. Corequisite: SBSN 410P.

**410P. Health Alterations II Practicum (3)** Builds upon Health Alterations I and related practicum and continues implementation of evidence-based nursing practice, progressing in complexity, in a variety of settings with adults experiencing health alterations. Six practicum hours per week. Corequisite: SBSN 410.

**411P. Nursing Internship (2-4)** A guided practicum experience utilizing clinical decision-making skills in a health care setting. For two internship credit hours, a minimum of 90 hours of scheduled clinical experiences, seminars, and consultation with faculty are required. A minimum of 45 hours for each additional credit hour is required. For Four-Year track, Prerequisites: SBSN 330, 330P, 340, 340P, 360, 360P. For RN Completion track, Prerequisites: SBSN 310, 310P, 350.

**420. Current Topics in Nursing (3)** Intensive study in a specialized area of professional nursing or a topic related to current health care practice. Selected area or topic is based on student interest and faculty expertise. Experiential learning activities may be required. For Four-Year track, Prerequisites: SBSN 330, 330P, 340, 340P, 360, 360P, 370; Prerequisites or Corequisites: SBSN 410, 410P. For RN Completion track, Prerequisite: SBSN 435P; Prerequisite or Corequisite: SBSN 370. Selected topics may be of interest to non-nursing majors. Non-nursing majors who have completed at least 60 credit hours, including completion of 6 hours of Group IV General Education Requirements and one course which includes basic research methodology, and who have a collegiate summary GPA of 2.5 or higher may enroll with consent of the instructor.

**430. Leadership in Nursing Practice (3)** Principles of leadership, management, and followership as they relate to the role of the professional nurse within the sociopolitical health care system. Emphasis is on first level management, team leadership, client advocacy, communication, critical thinking, decision making, role development within the profession, theoretical models, cultural diversity, and ethi-

cal leadership issues. For Four-Year track, Prerequisites: SBSN 330, 330P, 340, 340P, 360, 360P, 370; Corequisites: SBSN 410, 410P. For RN Completion track, Prerequisite: Admission to the BSN Program, Prerequisite or Corequisite: SBSN 350.

**431. Complex Nursing Practice (3)** Expansion of decision making in nursing process with client systems experiencing acute and/or life-threatening disequilibriums. Prerequisite: SBSN 331, 331L, 341, 341L; for the RN completion track: SCHM 102, SBSN 310, 310L, 350. Corequisite: SBSN 431L.

**431L. Complex Nursing Practicum (4)** Application of nursing process with individual client systems experiencing acute and/or life-threatening disequilibriums. Eight laboratory hours per week. Corequisite: SBSN 431.

**435P. Professional Nursing Role Transition Practicum (4)** A preceptored practicum that provides opportunities for RN-BSN completion track students to expand their current level of practice by focusing on the concepts of leadership, management, and clinical role development in a healthcare setting of the student's choice. Identification of a project focus, analysis of professional roles and incorporation of evidence-based practice are included. Eight practicum hours per week. Prerequisite: SBSN 430. Prerequisite or Corequisite: SBSN 370.

**441. Psychiatric Mental Health Nursing (3)** Evidence-based psychiatric mental health nursing practice. Emphasis is on the promotion of mental health and prevention of mental illness, and on nursing interventions related to primary mental health alterations across the life span. Prerequisites: SBSN 330, 330P, 340, 340P, 360, 360P, 370. Prerequisite or corequisites: SBSN 410, 410P, 430. Corequisite: SBSN 441P.

**441P. Psychiatric Mental Health Nursing Practicum (3)** Implementation of evidence-based psychiatric mental health nursing practice in a variety of settings. Emphasis is on promotion of mental health and prevention of mental illness and on nursing interventions with individuals and groups of clients experiencing mental health alterations. Six practicum hours per week. Corequisite: SBSN 441.

**450. Health Alterations III (3)** Builds upon Health Alterations I & II and continues to focus on evidence-based nursing practice with adults experiencing health alterations, moving from simple to complex states of health and levels of care. For Four-Year track, Prerequisites: SBSN 410, 410P, 430, 441, 441P; Corequisite: SBSN 450P. For RN Completion track, Prerequisites: SBSN 310, 310P, 350; Corequisite: SBSN 450P.

**450P. Health Alterations III Practicum (2)** Builds upon Health Alterations Practica I & II and continues implementation of evidence-based nursing practice, progressing in complexity, in a variety of settings with adults experiencing health alterations. Four practicum hours per week. Corequisite: SBSN 450.

**451L. Leadership in Nursing Practicum (2)** Application of principles of leadership and management in selected health care settings. Four laboratory hours per week. Corequisite: SBSN 451.

**461. Community and Public Health Nursing (3)** Evidence-based nursing with individuals across the life-span, families and other diverse population groups. Levels of prevention are explored in relationship to epidemiology and the effects of environment and life-style on client health. Prerequisites or Corequisites: SBSN 450, 450P; Corequisite: 461P.

**461P. Community and Public Health Nursing Practicum (3)** Implementation of evidence-based community and public health nursing practice in health promotion, maintenance, and restoration in individuals across the life-span, families, and other diverse population groups in community settings. Six practicum hours per week. Corequisite: SBSN 461.

**497. Professional Nursing Issues (2)** Critical exploration of interrelated historical, socio-political, and cultural issues impacting the professional nurse and the quality and delivery of health care. Prerequisite: final semester of the curriculum or consent of instructor.

**498. Professional Nursing Role Transition Project (3)** Synthesis of knowledge from nursing, arts, and sciences through completion of a change project for a health care setting. Prerequisite: SBSN 435P.

**499P. Senior Practicum in Professional Nursing (3)** Capstone practicum, in a preceptored setting, that provides opportunities to synthesize and apply knowledge and skills necessary to function as a beginning professional nurse. Emphasis is on the application of evidence-based knowledge in planning, delivering and evaluating nursing practice consisting of one hundred and twenty-four hours of practicum spanning the last four weeks of the semester. Prerequisite: all other courses required for the major.

### **Philosophy (SPHL)**

**102. Introduction to Philosophy (3)** Introduction to the main problems of philosophy and its methods of inquiry, analysis and criticism. Works of important philosophers are read.

**201. History of Ancient Philosophy (3)** Introduction to the development of philosophy in the ancient world.

**202. History of Modern Philosophy (3)** Introduction to the development of post-Renaissance philosophy with primary emphasis on the seventeenth and eighteenth centuries.

**211. Contemporary Moral Issues (3)** Moral issues confronting men and women in contemporary society. Topics vary but may include discussion of problems related to abortion, drugs, euthanasia, war, social engineering, and punishment of criminals.

**309. Philosophy of Mind (3)** A study of traditional problems pertaining to understanding the concept of mind, for example, the mind-body relation, personal identity, and theories of consciousness.

**310. Ethics for the Professions (3)** Critical examination of selected moral issues and problems of current concern within the professions. Specific topics for study vary, but they are of special interest for the fields of medicine and health care, law and criminal justice, business, education and journalism.

**311. Ethics (3)** The moral principles of conduct and the basic concepts underlying these principles, such as good, evil, right, wrong, justice, value, duty and obligation. The ethical works of influential philosophers are analyzed in terms of these concepts.

**319. Epistemology (3)** The nature and foundations of knowledge with consideration of skepticism and problems of perception.

**390. Topics in Philosophy (3)** Selected topics in philosophy, planned around areas of interest. Prerequisite: junior or senior standing or consent of instructor.

**500. Senior Seminar: Human Nature and Society (3)** Selected philosophical topics from history, anthropology, sociology, psychology and politics. Prerequisite: Senior level standing or consent of instructor.

### Physical Education (SPED)

*Note: Elective credits for participation in physical education activity courses may be counted up to a maximum of four semester hours.*

**120. Fundamentals of Movement and Body Conditioning (1)** Development and improvement of basic axial and locomotor movements as they pertain to physical education activities with emphasis on agility, flexibility, strength and endurance through body conditioning. A fundamental knowledge of various fitness programs and terminology is included. Pass/fail credit.

**121. Golf and Bowling (1)** Skill development, playing strategy, knowledge of rules, scoring, and tournament play. Pass/fail credit.

**122. Tennis and Badminton (1)** Skill development, playing strategy, knowledge of rules, scoring, and tournament play. Pass/fail credit.

**123. Snow Skiing (1)** Basic maneuvers of conditioning, turning stopping, and selection and care of equipment and clothing. Pass/fail credit.

**124. Walk/Jog/Run (1)** Develop and carry out a personalized walking, jogging or running program by applying information on equipment selection, physiology, mechanics, psychology, training principles, conditioning, program guidelines, environmental concerns, nutritional guidelines, and injury prevention. Pass/fail credit.

**125. Combatives (1)** Skill development, strategy, knowledge of rules, scoring, and tournament competition in wrestling, judo, karate, and boxing. Pass/fail credit.

**126. Introduction to SCUBA Diving (1)** Basic techniques and skill development, care of equipment, and the principles and practices of safe SCUBA diving. Prerequisite: Ability to swim. Pass/fail credit.

**127. Handball and Racquetball (1)** Skill development, playing strategy, knowledge of rules, scoring, and tournament play. Pass/fail credit.

**128. Aerobics (1)** Participation and development of impact and low-impact aerobic routines. Selection of exercises and music are included.

**130. Folk, Square, and Social Dance (1)** Basic steps, terminology, sequence of movement of folk, square and social dances, including development of an appreciation of numerous dances. Pass/fail credit.

**140. Adult Recreational Sports (1)** Methods and materials for teaching activities of carry-over value adaptable to junior and senior high facilities. Such activities as boating, fishing, hunting, camping, backpacking, skiing, and recreational games are included. Pass/fail credit.

**141. Adventure Programming on a Ropes Course (1)** Participation and development of specific group and individual attitudes and skills through the use of low and high elements of the USC Upstateropes course. Pass/fail credit.

**142. Advanced Ropes Course Skills and Standards (1)** Advanced certification as ropes course facilitator. Knowledge and experience in the setup, spotting, and safety practices employed in state-of-the-art ropes course uses. Prerequisite: SPED 141. Pass/fail credit.

**143. Outdoor Climbing and Rappelling (1)** Skill development, safety, spotting, safety practices, and knowledge of and use of proper equipment. Pass/fail credit.

**150. Beginning Gymnastics and Tumbling (1)** Skill development, safety, scoring, and an introduction to competitive routines. Pass/fail credit.

**180. Swimming (1)** Skill development, basic strokes, elementary diving, knowledge of water and pool safety. Pass/fail credit.

**200. Foundations of Physical Education (3)** The scope of the physical education field, historical background, principles, philosophy, current issues, professional leadership and publications.

**223. Advanced Snow Skiing (1)** Pole plant location, moguls, planning line, constant turns, and advanced trail skiing. Prerequisite: ability to snow ski. Pass/fail credit.

**235. Dance and Gymnastics (3)** Skills analysis, methods and techniques for organizing and teaching dance, gymnastics and tumbling, including opportunities for peer teaching experience. Prerequisite or corequisite: SPED 200 or consent of instructor.

**242. Principles of Recreation (3)** The significance and meaning of leisure in modern society, theories of play, the recreational movement in the U.S., and programs of recreation in the school, community and industry.

**265. Officiating of Sports (3)** Rules, officiating techniques, and problems arising in officiating, with emphasis on major team sports. Students are encouraged to obtain official's rating.

**270. Introduction to Athletic Training (3)** Safety precautions, injury prevention, laboratory experiences, and legal issues in physical education and athletics. Prerequisite: SHED 170.

**280. Swimming and Water Safety (1)** The teaching of swimming and water safety, skill mastery, lifesaving, pool hygiene, management, and safety. For advanced swimmers.

**301. Exercise Physiology (3)** Physiological principles as applied to muscular activity and the effects of muscular activity on the human organism. Two class and three laboratory hours per week.

**302. Biomechanics (3)** Theory and techniques for analyzing motor performance, including cinematography, segmental analysis, and fundamentals of physical skills based on the laws and principles of mechanical and neuromuscular action. Two class and three laboratory hours per week.

**325. Sports Skills (3)** Skills analysis, methods and techniques for organizing and teaching sports skills including opportunities for peer teaching experience. Prerequisites or corequisites: SPED 200 or consent of instructor.

**390. Field Experience (1-3)** School or community experiences related to aspects of physical education. Prerequisites: sophomore standing and consent of adviser, instructor and dean.

**399. Independent Study (1-3)** Topics assigned and approved by adviser, instructor and dean.

**410. Movement Education (3)** Theoretical foundation for the nature and sequence of human physical growth and motor development, including development of knowledge and skill in games, movement for expressive purposes and educational gymnastics. A five-hour practicum in the public schools is required. Prerequisite: SPED 200.

**412. Teaching of Physical Education (3)** Orientation to teaching physical education in grades 7-12. Emphasis is on teaching styles, methods and curriculum. A five-hour practicum in the public schools is required. Prerequisite: SPED 200.

**445. Measurement and Evaluation of Physical Education (3)** History, basic statistical techniques utilized in scoring and interpreting tests, evaluation of measures now available in the field, and the administration of a testing program. Prerequisites: SMTH 201 or SPSY 225 or SSOC 220, fifteen hours in physical education theory courses and six hours of technique courses.

**453. Organization and Administration of Physical Education (3)** Organization and management of instructional, intramural, interscholastic, and recreational programs, with emphasis on criteria for the selection and evaluation of activities. Prerequisites: fifteen hours in physical education theory courses and six hours of technique courses.

**455. Physical Fitness: Assessment and Prescription (3)** Principles of exercise testing and prescription as they apply to fitness and performance, including the role of the health related components of fitness in performance, and/or physical fitness of normal and special populations, and the significance of cardiovascular programs through the life cycle. Prerequisites: SPED 200, SBIO 232. Prerequisite or corequisite: SPED 301.

**462. Physical Education for the Exceptional Child (3)** Programs of developmental activity and guidance for students with restrictive disabilities. Included are techniques for appraising students with faulty body mechanics, orthopedic defects, and other atypical physical conditions along with methods of handling, within the regular physical education class, the various handicaps commonly found in the schools. Prerequisite: SBIO 232. Prerequisite or corequisite: SPED 301.

**479. Directed Teaching in Physical Education (12)** A supervised clinical experience normally consisting of seven weeks in an elementary school and seven weeks in a secondary school. The experience includes exploration of ethical issues, research through analysis and evaluation of teaching, and oral presentation of research results. Prerequisite: Approved application for directed teaching. Corequisite: SEDF 485. Pass/fail credit.

## Physics (SPHS)

**101, 102. Introduction to Physical Science I & II (3,3)** Introduction to the concepts, ideas, and methods of physical science with emphasis on the principles of classical and modern physics and chemistry. Need not be taken in sequence.

**101L. Introduction to Physical Science I Laboratory (1)** Experiments, exercises, and demonstrations to accompany SPHS 101. Prerequisite or corequisite: SPHS 101.

**201, 202. General Physics I & II (4,4)** Mechanics, heat, sound, wave motion, electromagnetism, optics, and modern physics. Three class, one recitation, and two laboratory hours per week. Prerequisite for 201: SMTH 127 or consent of instructor. No previous background in physics is assumed. Prerequisite for 202: SPHS 201. SPHS 201.

**211, 212. Essentials of Physics I & II (4,4)** Mechanics, heat, wave motion, electromagnetism, optics, and modern physics taught from a calculus level. Three class, one recitation, and two laboratory hours per week. Prerequisite or corequisite for 211: SMTH 144. Prerequisite for 212: Physics 211. SPSY 211.

### **Political Science**

*See Government and International Studies*

### **Psychology (SPSY)**

*Note: Psychology 101 is a prerequisite for all other psychology courses unless otherwise specified.*

**101. Introduction to Psychology (3)** Survey of major topics in psychology (learning, perception, motivation, intelligence, etc.) and an introduction to methods used in psychological investigation.

**225. Psychological Statistics (3)** Statistical principles, including measures of central tendency, variability, relative standing, probability, techniques of regression and correlation, statistical hypothesis testing, analysis of variance and nonparametric statistics with applications in the social sciences. Prerequisites: SPSY 101, SMTH 121 or higher, or consent of instructor.

**302. Developmental Psychology (3)** Introduction to life span developmental psychology providing an overview of cognitive, social, emotional, and physical development from conception to senescence. Prerequisite: SPSY 101 or consent of instructor.

**303. Psychology of Learning and Memory (3)** Introduction to basic principles and theories of learning and memory including such topics as habituation, classical and instrumental conditioning, verbal learning, social learning theory, behavior modification, and modeling. Prerequisite: SPSY 101 or consent of instructor.

**304. Cognitive Psychology (3)** Higher mental processes including such topics as attention, decision making, problem solving, concept formation and cognitive growth. Prerequisites: SPSY 101 or consent of instructor.

**305. Sensation and Perception (3)** The processing and interpretation of physical (nonsocial) dimensions of environments and the effects of this processing on behavior. Topics include the structure and functions of the various sensory systems, visual and auditory pattern perception, color and motion perception, and perceptual development. Prerequisite: SPSY 101 or consent of instructor.

**307. Social Psychology (3)** The principles governing human interaction including factors such as group dynamics, leadership, prejudice and propaganda. Prerequisite: SPSY 101 or consent of instructor.

**308. Physiological Psychology (3)** Basic neural and endocrine processes and their correlation with behavior. Prerequisite: SPSY 101 or consent of instructor.

**309. Psychology of Personality (3)** The major theories of personality and the factors involved in the development of personality. Prerequisite: SPSY 101 or consent of instructor.

**310. Abnormal Psychology (3)** The nature of mental and emotional disorders including such topics as theories of emotional disorders and the causes and treatment of various disorders. Prerequisite: SPSY 101 or consent of instructor.

**311. Industrial and Organizational Psychology (3)** Survey of the theoretical and empirical foundations of human behavior in industries and organizations. Special consideration is given to applied problems as they relate to improving relationships between individuals and organizations. Prerequisite: SPSY 101 or consent of instructor.

**325. Introduction to Experimental Psychology (4)** Introduction to research methods for the study of behavior. Lectures, class discussion, and laboratory exercises drawn from diverse areas of psychology are used to provide practical knowledge and skill in data analysis, experimental design, and writing technical reports. Prerequisite: SPSY 101.

**350. Psychology of Adjustment (3)** The process by which people adjust to the demands made upon them as a result of living with others. Basic processes of motivation and learning are examined, especially as these relate to the acquisition of the mechanisms of adjustment. Prerequisite: SPSY 101 or consent of instructor.

**351. Psychology of the Mentally Retarded (3)** The nature and causes of mental retardation and the behavior and potentialities of retarded children. Prerequisite: SPSY 101 and a course in the area of child psychology or child development.

**399. Independent Study (3-6)** The student, in conjunction with a psychology faculty member, plans an individualized study program. Prerequisite: SPSY 101.

**400. Topics in Psychology (3)** Survey of a selected topic planned around a faculty or student area of interest. Prerequisite: SPSY 101 or consent of instructor.

**402. Experimental Topics in Psychology (4-8)** The formation of testable hypotheses, research strategies, data collection and analysis, critical evaluation and scientific documentation as applied to a particular content area in psychology (for example, development, learning and memory, social, physiological, personality, industrial and organizational). Laboratory experiences are an integral part of this course. Prerequisites: SPSY 101, SPSY 225 (or a statistics course), SPSY 325 and corresponding SPSY 300-level course, or consent of instructor.

**417. Psychological Tests (3)** Theory, development, and application of intelligence, achievement, aptitude, and personality assessment measures. Prerequisite: SPSY 101, SPSY 225 (or a statistics course) or consent of instructor.

**418. Psychology of the Exceptional Child (3)** Causes, characteristics, and guidance needs of exceptional children including such topics such as mental deficiency, physical handicaps, and the unusually bright child. Prerequisites: SPSY 101 and a course in the area of child psychology or development.

**420. Psychology of Men (3)** Investigation of the male role in society today, with an overview of the historical forces which have influenced the biological, cultural, social, cognitive, emotional, and sexual aspects of the male role. Prerequisite: SPSY 101, SPSY 300 level course, or permission of the instructor.

**421. History and Systems of Psychology (3)** Historical roots of modern psychological theories and a survey of various present-day approaches. Prerequisite: SPSY 101, two 300-level psychology courses, and junior standing; or consent of instructor.

**442. Psychology of Women (3)** Women's experiences, present day status and life-styles, and the biological and cultural antecedents of women's roles. Prerequisite: SPSY 101 or consent of instructor.

**460. Human Sexual Behavior (3)** Psychological, physiological, and sociological factors in human sexual behavior and attitudes. Prerequisites: SPSY 101, junior or senior standing, or consent of instructor.

**499. Psychology Internship (1-6)** Supervised work experience in community agency or hospital. Fifty hours of work for each credit hour are required. Prerequisites: Psychology major, SPSY 101, senior standing and consent of instructor.

**502. Senior Seminar: Special Topics in Psychology (3-6)** Selected topics in psychology planned around areas of faculty interest and competence. Prerequisites: SPSY 101, SPSY 225 (or a statistics course), SPSY 325, or consent of instructor. In order to enroll in senior seminar, a student must have completed all of the prerequisite courses with a minimum grade of C.

**504. Senior Seminar: Cognitive Processes (3)** Experimental approaches to cognitive processes including data and theory relating to attention, intelligence, cognitive growth, problem solving, and concept formation. Prerequisites: SPSY 101, SPSY 225 (or a statistics course), SPSY 304, SPSY 325, or consent of instructor. In order to enroll in senior seminar, a student must have completed all of the prerequisite courses with a minimum grade of C.

**510. Senior Seminar: Abnormal Behavior in Children (3)** Theories of child behavior problems, descriptions of types of disorders, principles of assessment, and methods of

intervention. Prerequisites: SPSY 101, SPSY 225 (or a statistics course), SPSY 325, SPSY 302, SPSY 310, or consent of instructor. In order to enroll in senior seminar, a student must have completed all of the prerequisite courses with a minimum grade of C.

**511. Senior Seminar: Advanced Industrial and Organizational Psychology (3)** Exploration of organizational behavior with emphasis on research and application. Prerequisites: SPSY 101, SPSY 225 (or a statistics course), SPSY 311, SPSY 325, or consent of instructor. In order to enroll in senior seminar, a student must have completed all of the prerequisite courses with a minimum grade of C.

**512. Senior Seminar: Theories of Counseling and Psychotherapy (3)** The different approaches to counseling and psychotherapy with emphasis upon both theory and technique. Prerequisites: SPSY 101, SPSY 225 (or a statistics course), SPSY 325, SPSY 309, or consent of instructor. In order to enroll in senior seminar, a student must have completed all of the prerequisite courses with a minimum grade of C.

## Recreation (SREC)

**101. Introduction to Recreation (3)** Introduction to the concepts of recreation and leisure, its history, the evolution of recreation, an overview of professional preparation, assistance in the development of personal uses of leisure, and a survey of the recreation profession and organizations: commercial, government, and voluntary.

**201. Programming in Recreation (3)** Planning recreation and leisure activities through the use of human and material resources in public, private, and commercial recreation programs for all age levels. Activities include: sports, arts and crafts, cultural and performing arts, social functions, outdoor activities, and hobbies. Prerequisite: SREC 101.

**301. Administration of Recreation (3)** The organization, administration, supervision, planning, budgeting, and evaluation of recreational operations within most types of recreational agencies. Prerequisites: SREC 101 and 201.

**401. Leisure and Aging (3)** Practical application of principles in the provision of leisure and recreation services to the aging population focusing on individual needs, the process of program planning for the aging, resource development, and application strategies. Models are taken from successful programs in international, national, state, local and institutional settings. Prerequisites: SREC 101 and 201.

**462. Recreation for Selected Populations (3)** Practical application of principles in the provision of recreation services to populations limited in access to normal recreation programs. Focus is on individual populations and the respective barriers to participation, the process of

program planning and resource development, and the practical experience of plan application. Prerequisite: junior standing.

**480A. Internship: Aquatics (6)** Guided practical experience in an elected, organized recreational setting giving on-site experience in planning, executing, and evaluating recreational programs within an aquatic setting. Prerequisite: junior standing.

**480B. Internship: Community/Organizations (6)** Guided practical experience in an elected, organized recreational setting giving on-site experience in planning, executing, and evaluating recreational programs within community and organizational settings. Prerequisite: junior standing.

**480C. Internship: Industrial (6)** Guided practical experience in an elected, organized recreational setting giving on-site experience in planning, executing, and evaluating recreational programs within an industrial setting. Prerequisite: junior standing.

**485. Senior Seminar (1)** The integration of knowledge of recreation and individual professional activity at an advanced level utilizing research, oral presentation, a series of discussions, conferences, and role-playing experiences related to the various aspects of organized recreation as a career. Internships, employment opportunities, ethical issues, and other related topics are reviewed.

### Religion (SREL)

**103. Comparative Religion (3)** Beliefs and principles of the major faiths of Asia, the Middle East, and Africa, viewed from historical, cultural, and theological perspectives.

### Sociology (SSOC)

*Note: Sociology 101 is prerequisite to all other sociology courses. Sociology 101, 301, 302 and 501 are core courses.*

**101. Introduction to Sociology (3)** Introduction to the major theoretical and methodological perspectives used to explain, investigate and analyze social life.

**201. Introduction to Statistics for the Social Sciences (3)** Fundamental principles of descriptive and inferential statistics as used in the social sciences, including measures of central tendency and variation, the normal approximation, probability, chance variability, estimation, hypothesis testing, and correlation.

**301. Sociological Theory (3)** Roots and historical development of various sociological lenses as tools for examining the social world.

**302. Sociological Research Methods (3)** Quantitative, qualitative and comparative methods used in social science research, focusing on research design, data collec-

tion and analysis, and ethical issues. Prerequisite or corequisite: SSOC 301 or consent of instructor.

**310. Individual and Society (3)** Selected theoretical orientations, methodological procedures, and research findings pertaining to the relations between the individual and society.

**311. Social Problems Topics (3)** Sociological investigation of one or more topics selected by the faculty, such as globalization, youth, ethnic cleansing and genocide, human rights, terrorism, world conflict, and war.

**320. Sociology of Aging (3)** Processes of aging as a form of socialization and demographic reality, including institutional effects. The status of the elderly and the sources of prejudice and discrimination they experience are emphasized.

**321. Animals and Society (3)** Sociological perspectives on human-animal interaction and the role of animals in society.

**323. Urban Sociology (3)** Characteristics, causes, and impacts of city life. Different types of urban areas and current issues are examined from comparative, historical, and global perspectives.

**325. Social Movements (3)** Characteristics, causes, and impacts of social and political movements in the modern world. Different types of movements, including the American civil rights movement, are examined from comparative, historical, and global perspectives.

**327. Population Dynamics (3) (=SGEG 340)** Issues in measurement of the distribution and development of human population. Applies the analytical methods used in accounting for the effects of births, deaths and migrations.

**328. Social Demography (3)** Selected theoretical orientations, methodological procedures and historical perspectives related to the social analysis and context of demographic change.

**329. Social Change (3)** Applies sociological lenses to current major social, cultural, economic, political, and global transformations, emphasizing their interrelationships.

**330. Social Inequality (3)** Theoretical perspectives and research on the unequal distribution of wealth power, and prestige in social life on a global, national, and local scale. Attention is given to the impact of globalization on social stratification.

**333. Race and Ethnic Relations (3)** Examines the basic concepts of race and ethnicity, relevant sociological theories, and their application to critical issues.

**335. Sociology of Women (3)** Theoretical and methodological approaches to the study of women in societies. The importance of gender in defining women's roles is emphasized, along with the role of social institutions in contributing to the subordination of women as a group.

**337. Gender and Society (3).** A sociological investigation of gender as a fundamental principle of social life. The interdependence of gender constructions and of societies' inequality structures across social institutions is explored.

**341. Sociology of Families (3)** Methods and theories used in the examination of intimate human relationships, including parenting, violence and abuse, and divorce and remarriage. Emphasizes the social factors that bring about change in family-related behaviors and create diversity in family forms.

**343. Political Sociology (3)** The societal conditions affecting political ideas, institutions, and practices. The role of politics in society is examined from comparative, historical, and global perspectives.

**345. Sociology of Religion (3)** The societal conditions affecting religious beliefs, institutions, and practices. The role of religion in society is examined from comparative, historical, and global perspectives.

**347. Sociology of Organizations and Work (3)** Sociological investigation of how post-industrial society and globalization impact the workplace, jobs, workers, gender, families and communities. The role of leadership in organizations is also examined.

**351. Social Deviance (3) (=SCRJ 423)** Theories, methods and substantive issues in the creation, involvement, recognition and control of deviance. Sociological theories and pertinent research data are integrated in the context of contemporary societal issues.

**353. Sociology of Crime (3)** Social factors in the development, identification, and treatment of crime and criminals.

**355. Juvenile Delinquency (3) (=SCRJ 351)** Social factors in the development, identification and treatment of delinquents and juvenile delinquency in the context of juvenile justice systems.

**357. Sociology of Mental Health and Mental Illness (3)** Social factors in the development, identification, and treatment of mental illness.

**391. Special Topics (3)** Emerging issues in contemporary sociology. Selected topics organized around faculty and student areas of special interest. This course can be taken more than once if the topic is different.

**395. Internship (3)** Supervised work experience in a community agency based on an individualized, contracted program planned in conjunction with the relevant sociology faculty member. Ten hours per week in the field placement, at least three class meetings, and a formal, written sociological analysis of the field experience are required. The course may be taken more than once, but may be applied toward major credit in sociology only once. Normally offered every spring semester.

**399. Independent Study (1-6)** An individualized, contracted program of study planned in conjunction with a sociology faculty member.

**499. Senior Seminar (3)** A capstone course designed around topics selected by faculty. Emphasis is on research with written and oral presentations. Prerequisites: SSOC 301, 302, and 12 additional hours of upper level sociology with a C or better and statistics.

### Spanish (SSPN)

*Note: Unless otherwise indicated, readings, lectures and discussion in foreign language courses above the elementary level are principally in the language concerned. Incoming students with previous experience in a foreign language must take a placement test.*

**101. Introductory Spanish I (3)** Fundamentals of the language and culture through speaking, listening, reading, and writing. Admission to SSPN 101 is intended for those who have never studied Spanish previously.

**102. Introductory Spanish II (3)** Fundamentals of the language and culture through speaking, listening, reading, and writing. Prerequisite for SSPN 102 is SSPN 101.

**121. Elementary Spanish (4)** Intensive review and continuation of basic grammar and vocabulary for fundamental communication skills. Placement in SSPN 121 assumes a minimum of two years high school level experience in the language. Course includes material covered in SSPN 101 and SSPN 102. May not be taken by students who have completed SSPN 101 or SSPN 102.

**201. Intermediate Spanish (3)** Review of the basic principles of the language, with emphasis on reading, writing, and oral skills. Prerequisite: SSPN 102 or 121 or placement through testing.

**202. Intermediate Spanish (3)** Review of the basic principles of the language, with emphasis on writing, oral skills, and the reading of literary and other authentic texts. Prerequisite: SSPN 201 or placement through testing.

**204. Latin American Culture (3)** Readings and visuals on historical, economical, cultural and social developments in Latin America, taught in English. Prerequisite: SEGL 102 or consent of instructor.

**210. Spanish Oral Communication (3)** Enhancement of oral expression through group discussion, oral presentations, and vocabulary development. Prerequisite: SSPN 202 or placement through testing.

**250. Selected Spanish Studies Abroad (3-6)** Development of intermediate level communication skills together with immersion in the culture of a foreign country. Prerequisite: SSPN 102 or 121 or consent of instructor.



**308. Business Spanish (3)** Fundamental elements of language and exercises in composition centering on business communication skills. Prerequisite: SSPN 202 or consent of instructor.

**309. Spanish Grammar and Composition (3)** Fundamental elements of the language and exercises in composition. Prerequisite: SSPN 202 or consent of instructor.

**310. Spanish Conversation (3)** Advanced vocabulary development and acquisition of fluency through aural and oral presentations and conversation groups. Prerequisite: SSPN 210 or placement test.

**315. Spanish for the Professions (3)** Practice in oral and written language pertinent to a specific career, such as health care, criminal justice or business. Prerequisite: SSPN 202 or consent of instructor.

**320. Spanish Civilization (3)** Culture and civilization of Spain. Prerequisite: SSPN 202 or consent of instructor.

**321. Latin American Civilization (3)** Cultural heritage of the Latin American people from the pre-Columbian period to the present. Prerequisite: SSPN 202 or consent of instructor.

**330. Survey of Spanish Literature I (3)** Introduction to representative authors and works from medieval, Renaissance, and Golden Age Literature. Prerequisite: Spanish 202 or consent of instructor.

**331. Survey of Spanish Literature II (3)** Introduction to major movements, principal authors, and representative works in Spanish literature since 1700. Prerequisite: SSPN 202 or consent of instructor.

**332. Survey of Spanish American Literature I (3)** Introduction to representative authors and works from pre-Columbian times through the colonial era. Prerequisite: SSPN 202 or consent of instructor.

**333. Survey of Spanish American Literature II (3)** Introduction to major movements, principal authors, and representative works from the nineteenth century to the present. Prerequisite: SSPN 202 or consent of instructor.

**350. Selected Spanish Studies Abroad (3-6)** Development of advanced level communication skills together with immersion in the culture of a foreign country. Prerequisite: SSPN 202 or 210 or 250 or consent of instructor.

**398. Topics in Spanish Language or Literature (1-3)** Prerequisite: SSPN 202 or consent of instructor.

**399. Independent Study or Internship (1-3)** Supervised professional experience or research outside the classroom. For three internship credit hours, a student is to work 135 hours with an approved agency; for two credit hours, 90 hours; for one credit hour, 45 hours. For an internship or for an independent study, a contract must be signed by the

student and by the instructor of record and other designated faculty and administrators. A student may repeat SSPN 399 once with a different internship or independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisites: GPA 2.0 overall, 2.5 in foreign language courses, and consent of faculty supervisor.

**450. Foreign Language Technology (3) (=SFRN 450)** Use of language laboratories, computers, videos, and various other materials in foreign language teaching. Prerequisite: SSPN 202 or SFRN 202 or consent of instructor.

**453. Introduction to Romance Linguistics (3) (=SFRN 453)** Descriptive, historical, and applied linguistics in French and Spanish. Prerequisite: SSPN 202 or SFRN 202 or consent of instructor.

**490. Senior Seminar in Spanish (3)** Reading and research on selected topics designed to integrate knowledge, to explore ethical issues, and to gain experience in research and oral presentation. Prerequisite: two Spanish literature courses.

### Speech (SSPH)

**201. Public Speaking (3)** Oral communication and speaking before an audience. Prerequisite: SEGL 102 or consent of instructor.

**201H. Public Speaking honors (3)** An in--depth consideration of theories and principles of speech construction, analysis and delivery. The writings of classical and contemporary philosophers, theorists and rhetoricians are considered. Intensive reading, writing, research, delivery and a service component are included. Prerequisites: SEGL 102; admission to honors program as a second year student or permission of director of honors program.

**301. Theories and Principles of Human Communication (3)** Theories, principles and functions of human communication. Topics include culture, nonverbal communication, listening skills, self-disclosure, perception and interviewing. Prerequisites: SEGL 102 or consent of instructor.

**303. Ethics in Human Communication (3)** An investigation of ethical principles relevant to interpersonal, small group and organizational communication. The relationship among philosophy, rhetoric, ethics and human communication is explored. Prerequisite: SSPH 301 or consent of instructor.

**310. Interpersonal Communication (3)** The study of the communication process as a form of practical action between individuals. The classroom functions as an interpersonal laboratory to study and practice interpersonal skills through discussions, exercises and projects. Prerequisites: SSPH 201 or consent of instructor.

**315. Conflict Resolution (3)** Theories, research and function so of conflict resolution strategies in interpersonal, organizational, and community settings. Topics include conflict analysis, conflict management skills, dispute transformation and alternative dispute resolution. Prerequisite: Junior standing or consent of instructor.

**333. Advanced Public Speaking (3)** The principles and theories of speech composition. Areas of focus include rhetorical theory, strategic organization, evidence, reasoning and delivery. Prerequisite: SSPH 201 or consent of instructor.

**340. Voice and Diction (3)** The analysis, evaluation, and improvement of speech based on the anatomy and physiology of the vocal mechanism, voice production, and articulation.

**398. Topics in Speech Communication (3)** A specific area of speech is explored. Individual topics are announced.

**415. Mediation (3)** Concepts, skills and functions of mediation in interpersonal, organizational, and community settings. Topics include mediator styles and standards, principles of cooperation and problem-solving, and strategies for dispute transformation. SSPH 415L is available for additional credit. Prerequisite: SSPH 315.

**415L. Mediation Laboratory (1)** Demonstrations, exercises and applications of procedures used to develop mediation skills. Two laboratory hours per week. Prerequisite: SSPH 415 or consent of the instructor.

**440. Argumentation and Debate (3)** Fundamental principles, skills and ethics of argument. In-class debates required. Prerequisites: SSPH 201 or consent of instructor.

**441. Debate Laboratory (1)** Participation in debate team activities, including research, construction of debate briefs, competition and travel. Weekly meetings are required. May be repeated for a total of four credits. Prerequisite: SSPH 440. Corequisite: Debate team membership.

**448. Organizational Communication (3)** Theories, research and functions of communication in organizations, including communication practices and strategies in professional and social settings. Prerequisites: SSPH 201 or permission of the instructor.

**450. Communicating for Social Change (3)** An introduction to theories and principles essential to understanding the communicative function and processes of social movements. The construction and presentation of persuasive messages intended to produce social change are emphasized. Prerequisite: SSPH 201.

## **Theatre (STHE)**

**161, 162. Introduction to Theatre Art (3)** Understanding and criticism of dramatic literature, history, and production.

**170. Fundamentals in Acting (3)** The technique of body and voice control, improvisation, interpretation of characters, and characterization applied in scenes.

**260. Theatre Laboratory (1)** Participation in theatre production, including stage management, direction, costumes, makeup, lighting, sound, scenery, and business management. No formal class meetings. May be repeated for a total of four credits.

**301. Dramatic Theory and Criticism (3)** A philosophical, psychological and social theorist perspective. Analytical writing on topics such as social context and resonance of the drama, dramatic action, playwriting, dramatic illusion and Shakespeare is stressed. Prerequisite: SEGL 102 or consent of instructor.

**370. Voice for the Actor (3)** Group study of the voice in performance, using applied breath and resonance techniques aimed at enhancing vocal power for the actor or public speaker. Exercises and text work will be applied to voice techniques, creating a connection between the word image and vocal expression for the actor and public speaker. Prerequisite: SSPH 201; STHE 170 or consent of instructor.

**373. Fundamentals of Play Directing (3)** Text analysis and interpretation. The emphasis is on discovering the intention of the playwright and on blocking, including picturization and composition, culminating in each student's production of a one-act play for public presentation. Prerequisite: STHE 170

**374. Intermediate Acting (3)** Advanced scene and monologue performance including script analysis and character building. Plays of Classical Realists will be performed. Prerequisite: STHE 170.

**376. Stage Movement for the Actor (3)** Centering, body alignment and kinetic power influencing the projection of images and ideas. A studio warm-up and work-out developing the skills for the preparation of a variety of performance pieces demonstrating kinetic principles, culminating in a public performance.

**377. Stagecraft (3)** Drafting, design and interpretation of drawings for structural components of sets, lighting and costumes. Using the current production as a laboratory, students will concentrate on such skills as the basics of set construction, the computerized lighting system and costume construction.

**378. Playwriting (3)** Script analysis and preparation, dialogue development, character construction and scene composition. Students write full length manuscripts and participate in a public performance of readings from the completed plays. Prerequisite: English 102.

**379. Lighting Design (3)** The design and drafting process of lighting for a stage production. Designing a lighting plot and the role of lighting as a design element will be included; a research project will be assigned. Prerequisites: SEGL 102; STHE 161 or consent of instructor.

**380. Scene Design (3)** Design and drafting processes necessary for theatrical scenic design. Text analysis, research and the design for various play genres will be included, as well as the use of computer assisted drafting. Prerequisites: SEGL 102; STHE 377 or consent of instructor.

**381. Stage Management (3)** Experiences in technical organization and backstage supervision of a production. Topics will include backstage responsibilities, production cues, and director/manager and cast/crew relationships. Prerequisites: SEGL 102; STHE 170 or consent of instructor.

**382. Theatre for Youth (3)** Creative drama methods for youth. A children's play will be produced and performed. Prerequisites: SEGL 102; STHE 170 or consent of instructor.

**383. Stage Combat (3)** Basic techniques of unarmed and armed fighting for the theatre, stressing punches, kicks, tumbling, and falls, in the context of scene work and safety. Prerequisite: STHE 170 or consent of instructor.

**385. Theatre History I (3)** History of theatrical production including major dramatic texts, dramatists, and dramatic theory. Included is a survey of stage and auditorium architecture, stage machinery, scenery, costuming, lighting, acting and directing from pre-history through the Italian Renaissance. Prerequisite: SEGL 102.

**386. Theatre History II (3)** History of theatrical production including major dramatic texts, dramatists, and dramatic theory. Included is a survey of stage and auditorium architecture, stage machinery, scenery, costume, lighting, acting and directing, from the Italian Renaissance to the modern era. Prerequisite: SEGL 102.

**398. Topics in Theatre (3)**

**399. Internship or Independent Study in Theatre (1-3)** Supervised professional experience of research outside the classroom. For three internship credit hours, a student is to work 135 hours with an approved agency; for two credit hours, 90 hours; for one credit, 45 hours. For an internship or an independent study, a contract must be signed by the student and by the instructor of record and other designated faculty and administrators. A student may repeat STHE 399 once with a different internship or independent study contract description for a total of no more than six hours of undergraduate credit. Prerequisites: GPA 2.0 overall, 2.5 in major, consent of faculty supervisor and junior standing.

**401. Classical Styles in Acting (3)** Advanced study in the performance techniques and challenges particular to classical theatre. Applied scene work, focusing on the physical, vocal, and textual requirements for the performance of Shakespeare, Moliere, and Greek classical texts, will lead to the public performance of scenes and monologues. Prerequisite: STHE 170 or consent of instructor.

**402. Alternative Styles in Acting (3)** Advanced modes of performance and the physiological and vocal challenges particular to acting outside the realm of realism. Exercises will focus on physical approaches to building character through the context of scene work in Absurdist, Commedia, and other non-realist texts. Prerequisite: STHE 170 or consent of instructor.

**473. Advanced Play Directing (3)** Choosing text, casting, directing a collaborative team and exercising complete artistic control over all aspects of theatre production. Principles of actor coaching and staging technique culminate in the public presentation of a one act play with at least an hour's running time or a select act from a full-length manuscript. Prerequisite: STHE 373.

#### **Teaching English to Speakers of Other Languages (STSL)**

**410. Principles and Strategies of Teaching English to P-12 Speakers of Other Languages (3)** Methodologies and techniques for promoting acquisition of a second language. Included are first and second language acquisition models, variables affecting limited English proficient learners, learning strategy research, and effective instructional strategies for developing ESOL proficiency among P-12 learners. Prerequisite: Admission to the professional program in teacher education or current P-12 teacher certification.

**420. Teaching Reading and Writing to P-12 Speakers of Other Languages (3)** A theoretical foundation for the teaching of reading and writing English to limited English proficient (LEP) learners in P-12 schools. Included are theories of the development of literacy in a second language; contrastive rhetoric; and formal and informal reading/writing assessment strategies. Prerequisite: Admission to the professional program in teacher education or current P-12 teacher certification.

**430. Linguistic and Cultural Diversity in Education (3)** Issues affecting linguistically and culturally diverse learners in schools in the USA. Included are a brief history of bilingual education, cultural and learning style preference, cultural influences in curricula and materials, the legal issues related to serving limited English proficient learners, approaches to ESOL program development, culturally appropriate assessment strategies, and home-school collaboration. Prerequisites: Admission to the professional program in teacher education or current P-12 teacher certification.

**440. Practicum in the Instruction of English to Speakers of Other Languages in P-12 Schools (3)** A supervised

experience designed to allow the candidate to teach under guidance of a university supervisor and cooperating school teacher for a minimum of three months in P-12 schools. The experience includes planning and implementing instruction for students who speak languages other than English. Prerequisites: Admission to the professional program in teacher education or current P-12 teacher certification; STSL 410, STSL 420, and SEGL 451. Prerequisite or corequisite: STSL 430.

### University (SUNV)

**101. The Student in the University (3)** The purposes of higher education and the potential role of an individual student within the university and other learning environments. Open to freshmen only. This course does not count toward graduation in some majors.

**102. Freshman Orientation (1)** The successful transition into higher education through social, personal and academic development. Considered are topics and activities in study skills, time management, goal setting, careers, health and wellness, responsibility, cultural awareness, and the enhancement of the relationship between the faculty adviser and the student.

**103. Freshman Orientation (1)** The successful transition into higher education through academic, social, and personal development. Considered are topics and activities in time management, goal setting, responsibility, and careers, with special emphasis on study skills. The academic performance of students, in all classes, is monitored throughout the semester. Required of academic skills students. (Students cannot receive credit for both University 103 and 102.)

**201. Leadership Development I (2)** Various approaches to the definition of leadership and practical experience in building leadership skills. The critical questions of what is leadership, what are the qualities of a good leader, and what skills does a leader need are examined. Pass/fail credit.

**202. Introduction to Leadership II (2)** Practical experience in building leadership skills within the context of community-based leadership. The focus is upon the most pressing needs for leadership within the community to allow students to become directly involved with a relevant project. Prerequisite: University 201.

**301. Critical Analysis and Writing (3) (=SLGC 205)** The identification and evaluation of reasoning as it occurs in natural language uses. The techniques of careful reading and clear writing are demonstrated through the production of critical essays. Two lecture and one laboratory hour per week. Prerequisite: English 102 or equivalent.

**310. Leadership Development Internship (1-4)** Practical application of leadership principles through a public service internship. Limited to participants in the Leadership Development Program. Prerequisite: SUNV 202.

**398. Interdisciplinary Studies Internship (1-3)** Supervised work experience in a community agency or business based on an individualized, contracted program planned in conjunction with a faculty member and approved by the student's advisor. For three internship credit hours, a student is to work 135 hours with an approved agency; for two credit hours, 90 work hours; for one credit, 45 hours. A student may repeat SUNV 398 once with a different internship contract description for a total of no more than six hours of undergraduate credit. Prerequisites: junior standing, and approved internship contract. This internship cannot be used to meet concentration requirements for bidisciplinary and multidisciplinary concentrations.

**399. Independent Study (1-6)** An individualized, contractual program of study planned in conjunction with a faculty member involved with the student's interdisciplinary program of study. May be repeated for a total of no more than six hours of undergraduate credit with consent of advisor. Prerequisites: junior standing or permission of instructor.

**401. Senior Seminar in the Humanities (3)** Interrelationships between the arts and the humanities with emphasis on perceptual, analytical and communication skills. Individual topics for study vary. (Consult the instructor for a listing of topics for each offering.) Prerequisites: SATH 106, SMUS 110, SUNV 301, or consent of instructor.

**490. Senior Seminar in Interdisciplinary Studies (3)** Reading and research on selected topics designed to explore issues of broad interdisciplinary interest. Designed to integrate knowledge at an advanced level, explore ethical issues, and gain experience in research and oral presentation. Seminar topics vary. Prerequisites: senior standing and permission of IDS advisor. This course cannot be used to meet senior seminar requirements in bidisciplinary concentrations.

### Women's Studies (SWST)

**101. Introduction to Women's Studies (3)** Interdisciplinary theories, methods and issues comprising Women's Studies.

**301. Feminist Theory and Methods (3)** Philosophical exploration of feminist theories and feminist methods of inquiry. Prerequisite: SPHL 102 or SSOC 101 or SWST 101 or permission of instructor.

**355. U.S. Women's Movement (3)** In-depth, interdisciplinary perspectives on U.S. women's activism, actions and resistance strategies. Prerequisite: SWST 101 or SWST 301 or SGIS 350 or permission of instructor.

**398. Special Topics in Women's Studies (3)** Survey of a selected topic planned around a faculty or student area of interest. Prerequisite: SWST 101 or an upper division course primarily addressing women's issues.

**490. Senior Seminar (3)** Exploration, at an advanced level, of issues, topics, and dilemmas related to Women's Studies. Topics covered will vary depending upon the instructor.

tor. Prerequisites: senior standing, SWST 301 and other courses primarily addressing women's issues; permission of the instructor.

### **Women's Studies Courses**

The following courses have been approved as Women's Studies courses. Detailed descriptions are available under departmental listings.

- SCRJ376 Women and Crime
- SEGL437 Women Writers
- SGIS350 Women and American Politics
- SGIS420 Women and Politics: A Global Perspective
- SHST351 Women in Early Modern Europe and America
- SHST352 Women in Modern Europe and America
- SPSY442 Psychology of Women
- SSOC435 Sociology of Women

## Transfer Course Equivalencies

The following courses are used for receiving appropriate level transfer credit to USC Upstate.

- SEGL218 Introduction to Drama  
An introductory course in reading and reviewing plays
- SEGL225 Introduction to Poetry  
An introductory course in the analysis of poetry
- SEGL230 Images of Women in Literature  
An introductory course of archetypes and stereotypes of women in literature
- SLGC105 Basic Introduction to Logic  
Introduction to the structure of argument, including symbolization, proof, formal fallacies, deduction and induction
- SPHL131 Introduction to Ethics  
Critical examination of normative theories of obligation and value using a variety of moral problems as units of analysis
- SGIS215 Issues and Ideas: State and Local Politics  
Introductory examination of systems and issues relating to city, county, and state government  
Same as Criminal Justice 215
- SCRJ215 Issues and Ideas: State and Local Politics  
Introductory examination of systems and issues relating to city, county, and state government  
Same as Government and International Studies 215
- SSOC102 Social Aspects of Marriage and Family  
Introduction to the functions, processes, and problems of families
- SSOC205 Introduction to Contemporary Social Issues  
Introduction to selected current social issues and problems
- SSOC206 Introduction to Social Psychology  
Fundamental question about human behavior emphasizing the relationship between the individual and the group
- SCRJ210 Introduction to Juvenile Delinquency  
Introduction to fundamental questions regarding the development of deviant behavior as it applies to adolescents and their treatment within the criminal justice system  
Same as Sociology 210
- SSOC235 Introduction to Death and Dying  
Introduction to the social aspects of death and dying, including rites and rituals of different societies
- SPHL121 Moral Problems in the Modern World  
Discussion of contemporary moral problems and related theoretical issues, focusing on such issues as sexual morality, punishment, abortion, racism, sexism, warfare and civil disobedience
- SCHM211 Introduction to Organic Chemistry I  
Survey of the chemistry of carbon compounds and introduction to the basic principles of organic chemistry (Not for major credit in chemistry or biology)
- SCHM212 Introduction to Organic Chemistry II  
A continuation of SCHM 211. Survey of the chemistry of carbon compounds and introduction to the basic principles of Organic Chemistry (Not for major credit in chemistry or biology)