English Literature

**ENC 1101.** Freshman Composition and Rhetoric (3). This course includes drafting and writing of expository essays and a journal for a total of 7,000 words. May not be taken by students with credit in ENC 1149. No auditors.

**LIT 2000.** Introduction to Literature (3). This course introduces students to key terminology, concepts, and methodologies for the study of complex literature. The course provides a groundwork in literary types for non-majors and is also strongly recommended as preparation for upper-level (3000- or 4000-level) coursework in the field.

Math/Statistics

**MGF 1106.** Mathematics for Liberal Arts I (3). Prerequisite: MAT 1033 with a grade of "C−" or better or a suitable mathematics examination placement score. This course covers set theory; symbolic logic; counting principles; permutations and combinations; probability; statistics; geometry; applications and history of mathematics. Recommended background: two years of high school algebra. Course is not intended for students whose programs require precalculus or calculus courses.

**MGF 1107.** Topics in Practical Finite Mathematics (3). Prerequisites: MAT 1033 with a grade of "C−" or better or a suitable mathematics examination placement score. Recommended background: Two years of high school algebra. This course covers financial mathematics; linear and exponential growth; numbers and number systems; history of mathematics; elementary number theory; voting techniques; graph theory; game theory; geometry; and computer applications.

**MGF 3301.** Introduction to Advanced Mathematics (3). Prerequisite: MAC 2312. This course is an introduction to the methods of mathematics through such a variety of classical and modern topics as set theory, algebra, real number topology, and graph theory. Axioms and proofs are emphasized throughout. Not open to students who have received credit for MAD 2104.

**MAC 1105.** College Algebra (3). Prerequisite: MAT 1033 with a grade of "C−" or better or a suitable mathematics examination placement score. Recommended background: two years of high school algebra. This course is a review of algebraic operations, equations, and inequalities; functions and functional notation; graphs; inverse functions; linear, quadratic, rational function; absolute value; radicals; exponential and logarithmic functions; system of equations and inequalities; applications. On basis of test scores the student may be required to take a community college course before MAC 1105.

**MAC 1114.** Analytic Trigonometry (2). Prerequisite: MAC 1105. This course covers trigonometric functions, inverse trigonometric functions and their graphs; identities and conditional equations; solution of triangles; trigonometric form of complex numbers; DeMoivre's theorem and nth roots; introduction to plane vectors.
MAC 1140. Precalculus Algebra (3). Prerequisite: MAC 1105 or suitable mathematics examination placement score. This course covers functions and graphs, especially higher degree polynomial, rational, exponential, and logarithmic functions; systems of equations; solution of linear systems, matrix methods; determinants; sequences and series, induction; and the binomial theorem. The course also explores applications, approximation, and methods of proof. May be taken concurrently with MAC 1114.

MAC 2233. Calculus for Business (3). Prerequisite: MAC 1105. This course covers limits, continuity, first and higher derivatives, and the differential, with applications to graphing, rates of change, and optimization methods; techniques of integration and applications; introduction to multivariate calculus. Not open to students who have credit in MAC 2311 with a grade of "C−" or better.

MAC 2311. Calculus with Analytic Geometry I (4). Prerequisites: MAC 1147; or MAC 1140 and MAC 1114; or suitable mathematics examination placement score. This course covers polynomial, trigonometric, exponential, and logarithmic functions; first and second derivatives and their interpretations; definition and interpretation of the integral; differentiation rules; implicit differentiation; applications of the derivative; anti-derivatives; fundamental theorem of calculus. This course must be taken for reduced credit by students with prior credit for some of the content.

MAC 2312. Calculus with Analytic Geometry II (4). Prerequisite: MAC 2311 or suitable mathematics examination placement score. This course covers techniques of integration; applications of integration; series and Taylor series; differential equations. This course must be taken for reduced credit by students with prior credit for some of the content.

MAC 2313. Calculus with Analytic Geometry III (5). Prerequisite: MAC 2312. This course covers functions of several variables and their graphical representations; vectors; partial derivatives and gradients; optimization; multiple integration; polar, spherical, and cylindrical coordinate systems; curves; vector fields; line integrals; flux integrals; divergence theorem and Stokes' theorem. This course must be taken for reduced credit by students with prior credit for some of the content.

MAP 2302. Ordinary Differential Equations (3). Prerequisite: MAC 2312 with a grade of "B−" or better or MAC 2313 with a grade of "C−" or better. This course covers differential equations of the first order, linear equations of the second, systems of first order equations, power series solutions, Laplace transforms, numerical methods. Not open to students having credit in MAP 3305.

MAS 3105. Applied Linear Algebra I (4). Prerequisite: MAC 2312. This course covers Gaussian elimination, vector spaces, least squares problems, determinants, eigenvalues and eigenvectors, linear transformations, applications.

STA 1013. Statistics Through Example (3). This course provides students with a background in applied statistical reasoning. Fundamental topics are covered including graphical and numerical description of data, understanding randomness, central tendency, correlation versus causation, line of best fit, estimation of proportions, and statistical testing. Statistical thinking, relevant ideas, themes, and concepts are emphasized over mathematical calculation. In this class students learn many of the elementary principles that underlie collecting data, organizing it, summarizing it, and drawing conclusions from it.
STA 2023. Fundamental Business Statistics (3). Miscellaneous requirement: Two years of high school algebra is recommended. Special Note: High school students who earn a "3" or better on the AP Statistics Exam may elect to be given credit for STA 2023. This course covers statistical applications in business, involving graphical and numerical descriptions of data, data collection, correlation and simple linear regression, elementary probability, random variables, binomial and normal distributions, sampling distributions, and confidence intervals and hypothesis tests for a single sample. This course prepares students for further study and job preparation in the field of Business. The course emphasizes understanding of data and interpretation of statistical analyses, and requires students to think of data, and report the results of their analyses, in context.

STA 2122. Introduction to Applied Statistics (3). Prerequisite: MAC 1105. Special note: No credit given for STA 2122 if a grade of "C-" or better is earned in STA 2171, STA 3032, or QMB 3200. This course covers normal distributions, sampling variation, confidence intervals, hypothesis testing, one-way and two-way analysis of variance, correlation, simple and multiple regression, contingency tables and chi-square tests, and non-parametric statistics. No credit given for STA 2122 if a grade of "C-" or better is earned in STA 2171, STA 3032, or QMB 3200.

STA 3024. SAS for Data and Statistical Analyses (3). Prerequisite: STA 2023 or STA 2122. This course introduces students to the SAS programming language in a lab-based format. The objective is for students to develop programming and statistical computing skills to address data management and analysis issues using SAS. The course also provides a survey of some of the most common data analysis tools in use today and provides decision-making strategies in selecting the appropriate methods for extracting information from data.

Social Science/History

AMH 2020. A History of the United States Since 1877 (3). This course surveys the United States from the end of the Civil War to the present with emphasis on social, economic, and political problems of the 20th century. May not be taken by students with test credit in American history.

ANT 2000. Introduction to Anthropology (3). This introductory course offers a holistic approach to understanding what it means to be human, studying humans and human behavior from the perspectives of evolution and genetics, the archaeological record, and language and culture.

CLT 3378. Ancient Mythology, East and West (3). This course provides students with an introduction to the mythological traditions from a diverse group of ancient cultures, including those of Greece and Rome, the Near East, Northern Europe, India, China, Africa, and the Americas.

CPO 2002. Introduction to Comparative Government and Politics (3). This course addresses government institutions and current political parties throughout the world, as well as theories that explain similarities and differences among countries. Topics may include electoral systems, parliamentary systems, causes of political change, democratization, political culture, ideologies, and economic and social policy. Examples are drawn from Western democracies and developing countries.
ECO 2013. Principles of Macroeconomics (3). This course explores aggregate economics and national income determination, money and monetary theory, present macroeconomic conditions, and aggregative policy alternatives; theory of international trade and the balance of payments; economic growth and development.

ECO 2023. Principles of Microeconomics (3). This course covers consumption, production, and resource allocations considered from a private and social point of view; microeconomic problems and policy alternatives; economics of inequality and poverty; and comparative economic systems.

EUH 2000. Ancient and Medieval Civilizations (3). This course provides a survey of Western traditions from the beginnings through the end of the Middle Ages. Emphasis is on patterns of thinking and on those institutions most distinctive for the Western tradition. Students who have previous college credit in Western civilization courses covering the same general chronological period cannot receive credit for EUH 2000. May not be taken by students with test credit in European history.

GEO 1400. Human Geography (3). This course is an introductory survey of geographic theories, issues and applications from the human perspective. The course discusses how people interact with each other politically, economically, culturally and socially across distances, scales and within various physical environments. In addition, global contrasts are examined using urban versus rural habitation, local versus transnational trade, and uneven economic development.

INR 2002. Introduction to International Relations (3) This course introduces students to the study of international relations. Major topics include the different actors that participate in international relations and the different goals they pursue, the processes of conflict and cooperation, and recent trends in international politics.

POS 1041. American Government: National (3). This course investigates how the national government is structured and how the American political system operates. Covers the philosophical and constitutional foundations of American government, the branches of the national government, the mechanisms by which citizens are connected to their government, and the policy outputs of government.

PSY 2012. General Psychology (3) This course is a broad overview covering important psychological principles and findings within major subfields of psychology, and the basic scientific methods employed. A "bio-psycho-social" approach is emphasized throughout so that all behaviors (including how we think, feel, and act) are discussed in terms of biological, psychological, and social determinants and consequences.

REL 1300. Introduction to World Religions (3). This course surveys the major living religious traditions of the world, with attention to their origins in the ancient world and their classic beliefs and practices.

SYG 1000. Introductory Sociology (3). This course is an introduction to the fundamentals of sociology. In the course, emphasis is placed on exposure to the basic findings of empirical research studies in a wide range of areas traditionally examined by sociologists.

HUM 2020. The Art of Being Human: Examining the Human Condition Through Literature, Art, and Film (3). In this course, students gain an overview of the development of Western culture from Antiquity to the present as it is expressed through the arts (painting, sculpture, architecture, literature, music, film and the performing arts), and especially through literature. The course examines the human condition through culture and the arts to better understand how the humanities are interconnected.
MUH 2051. Music in World Cultures (3). This course provides an introductory survey of various musical traditions in a global perspective, exploring music both as a phenomenon of sound and as a phenomenon of culture. Students analyze tradition as a constantly evolving and transformative entity that nurtures and sustains core cultural values. The social context of music, including social structure, geography, globalization, mass mediation, conceptions of religion, instruments, aesthetic priorities, and cultural beliefs that inform music within given cultural contexts is emphasized.

MUL 2010. Music Literature, Listening and Understanding (3). This course is an introduction to music as a manifestation of human culture, as an expressive art form, and as an intellectual discipline. The course also develops a knowledge of a variety of significant musical repertoire, skills for perceptive listening, and the ability to respond to musical expression with critical insight.

PHI 2010. Introduction to Philosophy (3). This course introduces some of the central problems in philosophy. Students also learn how to construct and criticize arguments and develop their own philosophical positions.

PHI 2100. Reasoning and Critical Thinking (3). This course is designed to provide students with an understanding of the logical foundation of arguments and decisions. The course emphasizes acquisition of the skills necessary to construct clear, persuasive arguments. Students practice using reasoning to support conclusions and decisions. Students also evaluate reasons, data, arguments and conclusions presented in a variety of everyday circumstances.

PHI 2630. Ethical Issues and Life Choices (3). This course draws on ethical theories to explore the major ethical issues that one faces as one makes decisions about the kinds of activities to engage in and the kind of life to lead. Issues such as those involving life and death (e.g., abortion, euthanasia, animal rights) and social justice (e.g. discrimination, responsibility to future generations) are examined.

Natural Science

AST 1002. Planets, Stars, and Galaxies (3). This course provides general acquaintance with some of the facts, concepts and scientific methods of astronomy. As a liberal study course, the goal is to help students learn some basic facts of astronomy as well as gain an appreciation of astronomy as a science, the universe, and the current scientific ideas about its history and its future.

AST 1002L. Planets, Stars, and Galaxies Laboratory (1). Corequisite: AST 1002. This course, which consists of outdoor and indoor labs, provides a hands-on introduction to astronomy as an observational science. In the outdoor labs students learn how to make observations and measurements of planetary, stellar and galactic objects using either your unaided eyes, binoculars or a telescope. The indoor labs acquaint them with the telescope, the coordinate system used to locate astronomical objects on the sky, the motion of objects in the sky and other basic concepts of astronomy.
**BSC 1005.** General Biology for Non majors (3). This course consists of four units of contemporary biology topics, taught by biology professors/researchers who specialize in the subject matter. Topics vary each semester. The course emphasizes the development of science proficiency by teaching students to understand, use, and interpret scientific explanations of the natural world and apply this knowledge to social, environmental, political or wellness issues.

**BSC 1005L.** General Biology Laboratory for Non majors (1). This course emphasizes the development of multiple aspects of science proficiency for all students: knowing, using, and interpreting scientific explanations of the natural world; generating and evaluating scientific evidence and explanations; understanding the nature and development of scientific knowledge; and participating productively in the practices and discourses of science. Specifically, this course includes multiple investigations of the core concepts in biology that engage students in the practices of scientific inquiry. Biological systems are analyzed through experimentation, dissection, observation, and modeling.

**BSC 2010.** Biological Science I (3). This is the first part of a two-semester introductory biology course designed for those interested in pursuing a career in life sciences. The course provides the building blocks necessary for a student to gain a strong foundation in general biology. Topics covered provide an overview of biological processes and function at the molecular, cellular and organismal level.

**BSC 2010L.** Biological Science I Laboratory (1). This course introduces basic chemistry, energetics, metabolism, and cellular organization; molecular genetics and information flow; animal and plant function.

**BSC 2011.** Biological Science II (3). Prerequisite: BSC 2010. This is the second of a two-semester introductory biology course designed for those interested in pursuing a career in life sciences. The course provides an overview of the processes underlying the animal embryonic development, inheritance genetics, evolution and ecology.

**BSC 2011L.** Biological Science II Lab (1). Prerequisites: BSC 2010 and BSC 2010L. Corequisite: BSC 2011. This course focuses on reproduction and development, transmission (Mendelian) genetics, population biology, ecology, and evolution.

**CHM 1045.** General Chemistry I (3). Prerequisite: MAC 1105 with a grade of "C-" or better or placement beyond MAC 1105. This course includes topics such as chemical symbols, formulas, and equations; states of matter; reactivity in aqueous solution; electronic structure, bonding, and molecular geometry. Students taking CHM 1045 after taking CHM 1020 and/or CHM 1032 may register for reduced credit, as indicated in the department's policy on reduced credit.

**CHM 1045L.** General Chemistry I Laboratory (1). Prerequisite: MAC 1105 with a grade of "C-" or higher or placement beyond MAC 1105. Corequisite: CHM 1045. This laboratory offers an introduction to quantitative techniques and to the chemical laboratory. Topics include stoichiometry, atomic spectra, gases, as well as acids and bases.

**CHM 1046.** General Chemistry II (3). Prerequisites: CHM 1045 or CHM 1050, each with a grade "C-" or better. This course includes topics such as intermolecular forces, chemical kinetics, equilibrium, acids and bases, elementary thermodynamics, and electrochemistry.
CHM 1046L. General Chemistry II Laboratory (1). Prerequisites: CHM 1045 and CHM 1045L or CHM 1050 and CHM 1050L. Corequisite: CHM 1046. This laboratory offers an introduction to quantitative techniques and to the chemical laboratory. Topics include intermolecular forces, solutions, kinetics, equilibria, acids and bases, buffers, solubility, thermodynamics, and electrochemistry.

CHM 2210. Organic Chemistry I (3). Prerequisite: CHM 1046 and CHM 1046L, each with a grade of "C–" or better. Students who complete CHM 1045 or CHM 1050 with a grade of "B" or better and have instructor permission may take this course simultaneously with either CHM 1046 or CHM 1051. This course is the first in a sequence of courses for chemistry majors, premedicine students, biologists, or any other majors requiring a good background in organic chemistry, the course covers the fundamentals of structure and chemical behavior of organic molecules.

ESC 1000. Introductory Earth Science (3) This course is an introduction to the study of planet Earth, its internal dynamics, and surficial weathering, erosion, sedimentary processes, the composition and motion of its oceans and atmosphere, and its origin as part of the solar system. Course credit may not be received for this course and also GLY 1000, GLY 1030, or GLY.

EVR 1001. Introduction to Environmental Science (3). This course is an introduction to environmental science that covers the basic functioning of the earth's environmental system and human effects on that system.

PHY 1020. Physics and Technology for Future Presidents (3) This course is for non-science majors and contains the essential physics students need in order to understand today's core science and technology issues, and to become the next generation of world leaders. The course empowers students possessing any level of scientific background with the tools they need to make informed decisions and to argue their views persuasively with anyone, expert or otherwise.

PHY 2048C. General Physics A (5). (For science majors.) Prerequisite: MAC 2311. This course is designed to provide students with an understanding of how and why things move. Topics covered include kinematics, forces, energy, momentum, oscillations, and thermodynamics. The course is intended for physical science majors and engineers and to be taken as a sequence with General Physics B (PHY 2049C) and Intermediate Modern Physics (PHY 3101). Completing Modern Physics entitles students to a minor in physics. Calculus is used in this course.

PHY 2053C. College Physics A (4). (For science majors.) Prerequisites: MAC 1114 and MAC 1140 with grades of "C–" or better or suitable mathematics examination placement score. Corequisite: PHY 2053L. This course is the first semester of a two-semester sequence for life-sciences students and is intended to provide a general knowledge of the basic concepts of physics relating to mechanics, energy, gravity, rotational motion, fluids, heat, thermodynamics, vibrations and waves. Physics is based on problem solving and this class involves both solving word problems and performing laboratory exercises. The level of mathematical skill necessary to complete this course is a strong proficiency with algebra (especially word problems) and trigonometric functions; calculus is not used.

PCB 3043. General Ecology (3). This course focuses on topics such as: population biology; population growth; community processes, succession, nutrient cycling, and energy flow; species interactions; ecological efficiency; and biogeographical ecology.

PCB 3063. General Genetics (3). This course is an introduction to the principles of transmission and molecular genetics of prokaryotes and eukaryotes and significance of these principles to other aspects of biological science.
**PSB 2000.** Introduction to Brain and Behavior (3). This course helps students understand basic nervous system mechanisms that underlie behavior and how systematic observation and experimentation are involved in constructing our understanding of these mechanisms. The course also conveys an appreciation for utilizing critical thinking and scientific knowledge when making important decisions. (Cannot be taken after PSB 3004C.)

**Computer Science**

**CGS 2060.** Computer Fluency (3). This course teaches important computer and digital technology concepts and skills necessary to succeed in careers and in life. Course topics range from computer literacy basics, to today's technologies, and to the information systems on which today's businesses and organizations depend. Students learn about telecommunications, the Internet and the Web, management information systems, digital media, information security, digital society, as well as ethics.

**CGS 2100.** Microcomputer Applications for Business/Economics (3). This course enables students in business and economics to become proficient with microcomputer hardware and software applications that are typically used in the workplace. The following topics are covered: hardware concepts, operating systems, word-processing, spreadsheets, databases, networks, Internet, World Wide Web, multimedia presentations, and information systems. May not be applied toward computer science major or minor. Not open to students with credit in CGS 2060.

**COP 2258.** Problem-Solving with Object-Oriented Programming (3). This interdisciplinary course is designed for students who are interested in understanding the principles that govern Object-Oriented Programming (OOP) and software development in order to assist with problem solving in their own disciplines. The course addresses algorithm building principles, problem-solving strategies, analyzing problems to identify requirements, and designing an object-oriented solution. Students design, write, and debug computer programs.

**GS 3066.** Web Programming and Design (3). This course provides an overview of Internet communications and information services, as well as the technologies on which the Internet and Web are built. The course emphasizes Web design, development, and programming with participants learning the latest tools and techniques for building professional-grade, dynamic, and interactive Web pages and sites.

**CGS 3406.** Object-Oriented Programming in C++ (3). Prerequisite: MAC 1105. This course covers a brief introduction to computers, C++ basics, procedural abstraction and functions, an introduction to the object-oriented paradigm, namespaces, arrays, strings and vectors, pointers, and recursion. Emphasis is on program problem-solving. May not be applied toward a computer science major.

**CGS 3416.** Java Programming for Non-specialists (3). Prerequisite: MAC 1105. This course covers Java basics, a review of structured and object-oriented programming concepts, classes, constructors, interfaces, exceptions, I/O, graphics concepts, jar files, compilation, virtual machines, applications, applets, APIs, HTML, XML, and XHTML.
COP 3014. Programming I (3). Prerequisite: MAC 1140. This course covers fundamental concepts and skills of programming in a high-level language. Flow of control: sequence, selection, iteration, subprograms. Data structures: arrays, strings, structs, ADT lists and tables. Algorithms using selection and iteration (decision making, finding maxima and minima, basic searching and sorting, simulation, etc.). Good program design using a procedural paradigm, structure, and style are emphasized. Interactive and file IO. Testing and debugging techniques. Intended primarily for computer science or computer engineering majors, or anyone who is required to take COP 3330.

COP 3035. Introduction to Programming Using Python (3). Prerequisite: MAC 1105. This course includes Python basics, use of Python control and data structures, use of Python functions, Python I/O, and implementation of basic Python programming tasks.

COP 3252. Internet Applications Programming with Java (3). Prerequisite: COP 3330. This course covers the applications of the Java language to education, electronic commerce, scientific research, and distributed systems in general. Topics include the following: the architecture of the Web, including software protocols for passing information in typical Web applications; introduction to the Java programming language; developing Graphical User Interfaces using Swing; an introduction to distributed objects using Java Remote Method Invocation (RMI); and server-side programming using Servlets and JDBC. Emphasis is placed on practical programming using these technologies.

COP 3330. Object Oriented Programming (3). Prerequisite: COP 3014 or a comparable course in C or C++ programming. Corequisite: COP 3353. This course focuses on object-oriented programming in a modern programming language; classes, objects, inheritance, and polymorphism; introduction to data structures and container classes.

Foreign Languages

ARA 1120. Elementary Arabic I (4). This course is for students who have no previous knowledge of Modern Standard Arabic. The aim is basic proficiency in the four language skills: reading, writing, speaking, and listening. Basic vocabulary, sentence structure, grammar, and pronunciation in Modern Standard Arabic are introduced as well as one Arabic dialect. This course follows a communicative approach. It enables students to put the language they are learning into actual use. May not be taken concurrently with ARA 1121 and/or 2220 or by native speakers.

ARA 1121. Elementary Arabic II (4). Prerequisite: ARA 1120. This course introduces extended vocabulary and grammar, and basic conversation is emphasized. Students start conversing in spoken Arabic as well as reading and writing in Modern Standard Arabic. This course also develops the students' knowledge of Arab culture. May not be taken concurrently with ARA 1120 and/or 2220 or by native speakers.

ARA 2220. Intermediate Arabic (4). Prerequisite: ARA 1121. This course solidifies knowledge of basic grammar and expands the students' vocabulary. It emphasizes reading and writing in formal Arabic, as well as listening and speaking in Colloquial. Students participate in cultural activities, write compositions, and give oral presentations in class. May not be taken concurrently with ARA 1120 and/or 1121. Students in this course should have taken two semesters of Arabic in college or the equivalent.
**CHI 1120.** Elementary Chinese I (4). This course emphasizes speaking and listening, although an acquisition of reading and writing skills is also an integral part of the course. Some fundamental syntactic constructions introduced are: word order, nominal classifiers, verb classification, and formation of complex sentences. May not be taken by native speakers. May not be taken concurrently with CHI 1121 and/or 2220.

**CHI 1121.** Elementary Chinese II (4). Prerequisite: CHI 1120 or equivalent. This course further emphasizes the skills introduced in CHI 1120, including speaking, listening, and reading. May not be taken by native speakers. May not be taken concurrently with CHI 1120 and/or 2220.

**CHI 2220.** Intermediate Chinese (4). Prerequisite: CHI 1121 or equivalent. This course emphasizes reading and writing and introduces more of the essential Chinese syntax. More time is devoted to learning Chinese characters in both recognition and production levels. May not be taken by native speakers. May not be taken concurrently with CHI 1120 and/or 1121.

**FRE 1120.** Elementary French I (4). This course stresses oral comprehension, speaking, reading, and writing. May not be taken by native speakers. May not be taken concurrently with FRE 1121 and/or 2220.

**FRE 1121.** Elementary French II (4). Prerequisite: FRE 1120 or equivalent. This course places further emphasis on oral comprehension, speaking, reading, and writing. May not be taken by native speakers. May not be taken concurrently with FRE 1120 and/or 2220.

**FRE 2220.** Intermediate French (4). Prerequisite: FRE 1121 or equivalent. This intermediate course offers a rapid overview of basic French grammar and expands students' oral and written French expression through structured activities and compositions. May not be taken concurrently with FRE 1120, FRE 1121, or by native speakers.

**GER 1120.** Elementary German I (4). This course is an introduction to German. May not be taken by native speakers. Students with more than two years of high school German or the equivalent should consult the department for placement. May not be taken concurrently with GER 1110, 1111, 1120 or 2220.

**GER 1121.** Elementary German II (4). Prerequisites: GER 1110, GER 1120 or equivalent. This course may not be taken by native speakers. Students with three or four years of high school German or the equivalent should consult the department for placement. May not be taken concurrently with GER 1110, 1111, 1120, and/or 2220.

**GER 2220.** Intermediate German (4). Prerequisites: GER 1121, GER 1111 or equivalent. This course expands skills in reading, writing, and conversation. This course completes the baccalaureate degree requirement and serves as the transition to upper-level study. May not be taken by native speakers. May not be taken concurrently with GER 1110, 1111, 1120, and/or 1121.

**HBR 1120.** Elementary Modern Hebrew I (4). This course is an introduction to the alphabet, basic vocabulary, grammar, and syntax of modern Hebrew. Oral comprehension, speaking, and writing are emphasized through a communicative approach. Students are also introduced to modern Israeli culture. No previous knowledge required. May not be taken by native speakers. May not be taken concurrently with HBR 1121 and/or 2220.
**HBR 1121.** Elementary Modern Hebrew II (4). Prerequisite: HBR 1120 or equivalent. This course continues the introduction to modern Hebrew begun in HBR 1120. Cultural orientation and the practical use of Hebrew in meaningful situations. Oral comprehension, speaking, and writing are emphasized through a communicative approach. May not be taken by native speakers. May not be taken concurrently with HBR 1120 and/or 2220.

**HBR 2220.** Intermediate Modern Hebrew (4). Prerequisites: HBR 1120 and HBR 1121 or equivalent. This course is an introduction to modern Hebrew prose (fiction and non-fiction) as well as the continued development of speaking, listening, writing, and grammatical skills. May not be taken by native speakers. May not be taken concurrently with HBR 1120 and/or 1121. Completion of this course fulfills the foreign language requirement for the College of Arts and Sciences.

**ITA 1120.** Elementary Italian I (4). This introductory course gives the student basic grammatical structures to enable speaking, understanding, reading, and writing at the elementary level. May not be taken by native speakers. May not be taken concurrently with ITA 1111, 1121, and/or 2220.

**ITA 1121.** Elementary Italian II (4). Prerequisite: ITA 1120 or equivalent. This course builds upon the student's ability to speak, understand, read, and write Italian at an elementary level. May not be taken by native speakers. May not be taken concurrently with ITA 1111, 1120 and/or 2220.

**ITA 2220.** Reading and Conversation (4). Prerequisite: ITA 1111 or ITA 1121. This course stresses skills in reading and conversational Italian at the second-year level. Readings are supported by discussions of the materials. This course completes the baccalaureate degree requirement. May not be taken concurrently with ITA 1111, 1120, and/or 1121. May not be taken by native speakers.

**JPN 1120.** Elementary Japanese I (4). This course stresses speaking and listening, although the acquisition of reading and writing skills is also an integral part of the course. Some fundamental syntactic and morphological points introduced are word order, nominal particles, verbal endings, verb classification, speech levels, and the formation of some complex sentences. In addition, an introduction is given to the Japanese syllabaries and kanji. May not be taken by native speakers. May not be taken concurrently with JPN 1121, 2220 and/or 2300.

**JPN 1121.** Elementary Japanese II (4). Prerequisite: JPN 1120 or equivalent. This course continues to stress speaking, reading, listening, and writing skills using the syntactic and morphological points introduced in JPN 1120. Further study is made of the Japanese syllabaries and kanji. May not be taken by native speakers. May not be taken concurrently with JPN 1120, 2220 and/or 2300.

**JPN 2220.** Intermediate Reading and Conversation (4). Prerequisite: JPN 1121 or equivalent. May not be taken by native speakers. This course continues to emphasize speaking and listening and introduces more of the essentials of Japanese syntax. In this course more time is devoted to reading and writing. About 400 kanji are introduced. May not be taken concurrently with JPN 1120, 1121 and/or 2300.

**POR 1120.** Elementary Portuguese I (4). This course is a first semester course in Portuguese for beginning students with no prior exposure to the language. This course emphasizes the four basic communicative skills of listening, reading, speaking, and writing in a culturally authentic context.

**POR 1121.** Elementary Portuguese II (4). Prerequisite: POR 1120. This course is a second semester course in Portuguese for beginning level students. This course emphasizes the four basic communicative skills of listening, reading, speaking, and writing in a culturally authentic context.
**POR 2220. Intermediate Portuguese (4).** Prerequisites: POR 1120 and POR 1121. This course is a third semester course in Portuguese for intermediate level students. This course emphasizes the four basic communicative skills of listening, reading, speaking, and writing in a culturally authentic context.

**RUS 1120.** Elementary Russian I (4). This course introduces basic Russian. Students with high school language experience or equivalent should consult the department for placement. May not be taken by native speakers. May not be taken concurrently with RUS 1121 and/or 2220.

**RUS 1121.** Elementary Russian II (4). Prerequisite: RUS 1120 or equivalent. This course is a continuation of RUS 1120. May not be taken by native speakers. May not be taken concurrently with RUS 1120 and/or 2220.

**RUS 2220.** Intermediate Russian (4). Prerequisite: RUS 1121 or equivalent. This course focuses on grammar, reading, and conversation. May not be taken by native speakers. May not be taken concurrently with RUS 1120 and/or 1121.

**SPN 1120.** Elementary Spanish I (4). This course is the first of a three-semester sequence of courses for students with no prior knowledge of the Spanish language, either at the high-school or native-speaker level. The course emphasizes oral communication and grammatical expertise, as well as listening comprehension. Students read short texts and write paragraphs and short compositions in Spanish. May not be taken concurrently with SPN 1121, 1124, and/or 2220. May not be taken by native speakers. Some sections may be computer-assisted.

**SPN 1121.** Elementary Spanish II (4). Prerequisite: SPN 1120 or equivalent. This course emphasizes oral communication and grammatical expertise, as well as listening comprehension. Students read short texts and poems and write compositions in Spanish. May not be taken by native speakers. May not be taken concurrently with SPN 1120, 1124, and/or 2220.

**SPN 2220.** Intermediate Spanish (4). Prerequisite: SPN 1121 and SPN 1124 or equivalent. This course emphasizes oral communication and grammatical expertise, as well as listening comprehension. Students read short stories, poems, and articles, and write extended compositions and papers in Spanish. May not be taken concurrently with SPN 1120, 1121, and/or 1124. May not be taken by native speakers.