LOWER LEVEL AND GENERAL EDUCATION COURSES

The courses listed in this section are for informational purposes only; they are **NOT** offered at A&M-Central Texas.

Courses offered meeting core curriculum component areas are designated (010, 020, 030, etc...) at the beginning of the course description.

ACCT 2301. Principles of Financial Accounting. 3 Credit Hours.
This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS).

ACCT 2302. Principles of Managerial Accounting. 3 Credit Hours.
This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. Prerequisite(s): ACCT 2301 or ACCT 2401.

AGRI 1107. Agronomy (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies AGRI 1307. Laboratory activities will reinforce the fundamental principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods.

AGRI 1115. Horticulture (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies AGRI 1315. Laboratory activities will reinforce the structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. (Cross-listed as HORT 1101).

AGRI 1119. Introductory Animal Science (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies AGRI 1319 Introductory Animal Science (lecture). Laboratory activities will reinforce scientific animal production and the importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock.

AGRI 1307. Agronomy (Lecture). 3 Credit Hours.
(030) Principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods.

AGRI 1315. Horticulture (Lecture). 3 Credit Hours.
(030) Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. (Cross-listed as HORT 1301).

AGRI 1319. Introductory Animal Science (Lecture). 3 Credit Hours.
(030) Scientific animal production and the importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock.

AGRI 1407. Agronomy (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of AGRI 1307 Agronomy (lecture) and AGRI 1107 Agronomy (lab), including the learning outcomes listed for both courses.

AGRI 1415. Horticulture (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of AGRI 1315 Horticulture (lecture) and AGRI 1115 Horticulture (lab), including the learning outcomes listed for both courses. (Cross-listed as HORT 1401).

AGRI 1419. Introductory Animal Science (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of AGRI 1319 Introductory Animal Science (lecture) and AGRI 1119 Introductory Animal Science (lab), including the learning outcomes listed for both courses.

AGRI 2317. Introduction to Agricultural Economics. 3 Credit Hours.
(080) Fundamental economic principles and their application in the agricultural industry.

ANTH 2101. Physical Anthropology Lab. 1 Credit Hour.
(030) This laboratory-based course accompanies ANTH 2301 Physical Anthropology (lecture) and includes demonstrations of the major principles of the lecture course.

ANTH 2301. Physical Anthropology (lecture). 3 Credit Hours.
(030) (080) The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline.

ANTH 2302. Introduction to Archeology. 3 Credit Hours.
(040) (080) The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archaeological inquiry. Topics may include the adoption of agriculture, response to environmental change, the emergence of complex societies, and ethics in the discipline.

ANTH 2346. General Anthropology. 3 Credit Hours.
(040) (080) The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline.

ANTH 2401. Physical Anthropology (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of ANTH 2301 Physical Anthropology (lecture) and ANTH 2101 Physical Anthropology (lab), including the learning outcomes listed for both courses.

ANTH 2351. Cultural Anthropology. 3 Credit Hours.
(040) (080) The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline.

ARAB 2311. intermediate Arabic I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

ARAB 2312. Intermediate Arabic II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

ARCH 1301. Architectural History I. 3 Credit Hours.
(040) (050) Part one of a survey of the history of world architecture from pre-history to the present. This course focuses on the period from pre-history up to at least the 14th Century. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.7 History and Global Culture.

ARCH 1302. Architectural History II. 3 Credit Hours.
(040) (050) Part two of a survey of the history of world architecture from pre-history to the present. This course focuses on the period of neo-classicism up to the modern era. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.7 History and Global Culture.

ARCH 1303. Architectural Design I. 3 Credit Hours.
(050) An introductory studio providing foundation in the conceptual, perceptual, and manual skills necessary for two-dimensional and three-dimensional design. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills A.2 Design Thinking Skills A.4 Architectural Design Skills A.5 Ordering Systems.

ARCH 1307. Architectural Graphics I. 3 Credit Hours.
(050) Introduction to basic drawing methods and tools. Exploration of techniques available for the design process with emphasis on two-dimensional and three-dimensional composition. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.1 Professional Communication Skills.

ARCH 1311. Introduction to Architecture. 3 Credit Hours.
(040) (050) (080) An introduction to architecture that explores the practices, principles, and wider context of architecture and design. Focuses on the role of architecture in society, culture, and the broader physical context of the built environment. Course is intended to fulfill all or part of the following National Architectural Accrediting Board (NAAB) Student Performance Criteria: A.8 Cultural Diversity and Social Equity D.1 Stakeholder Roles in Architecture.

ARTS 1301. Art Appreciation. 3 Credit Hours.
(050) A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts.

ARTS 1303. Art History I. 3 Credit Hours.
(040) (050) A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century.

ARTS 1304. Art History II. 3 Credit Hours.
(040) (050) A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day.

ARTS 1313. Foundations of Art. 3 Credit Hours.
(050) Introduction to the creative media designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth.

ASTR 1103. Stars and Galaxies Laboratory. 1 Credit Hour.
(030) Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory. (Cross-listed as PHYS 1403, 1303, & 1103).

ASTR 1104. Solar System Laboratory. 1 Credit Hour.
(030) Study of the sun and its solar system, including its origin. May or may not include a laboratory. (Cross-listed as PHYS 1403, 1303, & 1103).

ASTR 1303. Stars and Galaxies (Lecture). 3 Credit Hours.
(030) Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory. (Cross-listed as PHYS 1403, 1303, & 1103).

ASTR 1304. Solar System (Lecture). 3 Credit Hours.
(030) Study of the sun and its solar system, including its origin. May or may not include a laboratory. (Cross-listed as PHYS 1403, 1303, & 1103).

ASTR 1403. Stars and Galaxies (Lecture + Lab). 4 Credit Hours.
(030) Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory. (Cross-listed as PHYS 1403, 1303, & 1103).

ASTR 1404. Solar System (Lecture + Lab). 4 Credit Hours.
(030) Study of the sun and its solar system, including its origin. May or may not include a laboratory. (Cross-listed as PHYS 1403, 1303, & 1103).

BCIS 1305. Business Computer Applications. 3 Credit Hours.
(080) Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet.

BIOL 1106. Biology for Science Majors Lab I. 1 Credit Hour.
(030) This laboratory-based course accompanies Biology 1306, Biology for Science Majors I. Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included.

BIOL 1107. Biology for Science Majors Lab II. 1 Credit Hour.
(030) This laboratory-based course accompanies Biology 1307, Biology for Science Majors II. Laboratory activities will reinforce study of the diversity and classification of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

BIOL 1108. Biology for Non-Science Majors Lab I. 1 Credit Hour.
(030) This laboratory-based course accompanies BIOL 1308, Biology for Non-Science Majors I. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

BIOL 1109. Biology for Non-Science Majors Laboratory II. 1 Credit Hour.
(030)This laboratory-based course accompanies BIOL 1309, Biology for Non-Science Majors II. Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology.

BIOL 1111. General Botany (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies Biology 1311, General Botany. Laboratory activities will reinforce fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors.).

BIOL 1113. General Zoology (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies Biology 1313, General Zoology. Laboratory activities will reinforce fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. (This course is intended for science majors.).

BIOL 1306. Biology for Science Majors I (Lecture). 3 Credit Hours.
(030) Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included.

BIOL 1307. Biology for Science Majors II (Lecture). 3 Credit Hours.
(030) The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Prerequisite(s): MATH 1314 or concurrent enrollment in higher-level mathematics is recommended.

BIOL 1308. Biology for Non-Science Majors I. 3 Credit Hours.
(030) Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

BIOL 1309. Biology for Non-Science Majors II (Lecture). 3 Credit Hours.
(030) This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology.

BIOL 1311. General Botany (Lecture). 3 Credit Hours.
(030) Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors.) Prerequisite(s): MATH 1314 or concurrent enrollment in higher level mathematics is recommended.

BIOL 1313. General Zoology (Lecture). 3 Credit Hours.
(030) Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. (This course is intended for science majors.) Prerequisite(s): MATH 1314 or concurrent enrollment in higher level mathematics is recommended.

BIOL 1322. Nutrition & Diet Therapy. 3 Credit Hours.
(030) (080) This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. (Cross-listed as HECO 1322).

BIOL 1406. Biology for Science Majors I (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of BIOL 1306 Biology for Science Majors I (lecture) and BIOL 1106 Biology for Science Majors I (lab), including the learning outcomes listed for both courses.

BIOL 1407. Biology for Science Majors II (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of BIOL 1307 Biology for Science Majors II (lecture) and BIOL 1107 Biology for Science Majors II (lab), including the learning outcomes listed for both courses.

BIOL 1408. Biology for Non-Science Majors I (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of BIOL 1308 Biology for Non-Science Majors I (lecture) and BIOL 1108 Biology for Non- Science Majors I (lab), including the learning outcomes listed for both courses.

BIOL 1409. Biology for Non-Science Majors II (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of BIOL 1309 Biology for Non-Science Majors II (lecture) and BIOL 1109 Biology for Non-Science Majors II (lab), including the learning outcomes listed for both courses.

BIOL 1411. General Botany (Lecture + Lab). 4 Credit Hours.
(030) Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi.

BIOL 1413. General Zoology. 4 Credit Hours.
(030) Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology.

BIOL 1414. Introduction to Biotechnology I. 4 Credit Hours.
(030) Overview of classical genetics, DNA structure, the flow of genetic information, DNA replication, gene transcription, protein translation. Principles of major molecular biology and genetic engineering techniques, including restriction enzymes and their uses, major types of cloning vectors, construction of libraries, Southern and Northern blotting, hybridization, PCR, DNA typing. Applications of these techniques in human health and welfare, medicine, agriculture and the environment. Introduction to the human genome project, gene therapy, molecular diagnostics, forensics, creation and uses of transgenic plants and animal and animal cloning and of the ethical, legal, and social issues and scientific problems associated with these technologies. Relevant practical exercises in the above areas.

BIOL 1415. Introduction to Biotechnology II. 4 Credit Hours.
(030) Biology course that focuses on an integrative approach to studying biomolecules with an emphasis on protein structures, functions and uses in the modern bioscience laboratory. Students will investigate the mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting, and analyzing experimental data.

BIOL 2101. Anatomy & Physiology I (Lab). 1 Credit Hour.
(030) The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses.

BIOL 2102. Anatomy & Physiology II (Lab). 1 Credit Hour.
(030) The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics).

BIOL 2106. Environmental Biology (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies Biology 2306, Environmental Biology. Laboratory activities will reinforce principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research.

BIOL 2116. Genetics (Lab). 1 Credit Hour.
(030) Study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering.

BIOL 2120. Microbiology for Non-Science Majors Laboratory. 1 Credit Hour.
(030) This course covers basics of culture and identification of bacteria and microbial ecology. This course is primarily directed at pre-nursing and other pre-allied health majors and covers basics of microbiology. Emphasis is on medical microbiology, infectious diseases, and public health.

BIOL 2121. Microbiology for Science Majors Laboratory (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies Biology 2321, Microbiology for Science Majors. Laboratory activities will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment.

BIOL 2301. Anatomy & Physiology I. 3 Credit Hours.
(030) Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

BIOL 2302. Anatomy & Physiology II (Lecture). 3 Credit Hours.
(030) Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

BIOL 2306. Environmental Biology (Lecture). 3 Credit Hours.
(030) Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research.

BIOL 2316. Genetics (Lecture). 3 Credit Hours.
Study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering.

BIOL 2320. Microbiology for Non-Science Majors (Lecture). 3 Credit Hours.
(030) This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health.

BIOL 2321. Microbiology for Science Majors (Lecture). 3 Credit Hours.
(030) Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Prerequisite(s): CHEM 1311 and CHEM 1111 or CHEM 1411 and BIOL 1306 and BIOL 1106 or BIOL 1406.

BIOL 2401. Anatomy and Physiology I. 4 Credit Hours.
(030) Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

BIOL 2402. Anatomy and Physiology II. 4 Credit Hours.
(030) Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

BIOL 2404. Anatomy & Physiology (specialized, single semester course, lecture + lab). 4 Credit Hours.
(030) Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized.

BIOL 2406. Environmental Biology (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of BIOL 2306 (lecture) and BIOL 2106 (lab), including the learning outcomes listed for both courses.

BIOL 2416. Genetics (Lecture + Lab). 4 Credit Hours.
(030) Study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering.

BIOL 2420. Microbiology for Non-Science Majors (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of BIOL 2320 Microbiology for Non-Science Majors (lecture) and BIOL 2120 Microbiology for Non-Science Majors Laboratory (lab), including the learning outcomes listed for both courses.

BIOL 2421. Microbiology for Science Majors. 4 Credit Hours.
(030) Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment.

BUSI 1301. Business Principles. 3 Credit Hours.
(080) This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business. Emphasized is the dynamic role of business in everyday life.

BUSI 2301. Business Law. 3 Credit Hours.
The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context.

BUSI 2305. Business Statistics. 3 Credit Hours.
(020) Descriptive and inferential statistical techniques for business and economic decision-making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course. (BUSI 2305 is included in the Business Field of Study.) Prerequisites: MATH 1324 Mathematics for Business & Social Science Majors.

CHEM 1105. Introductory Chemistry I (Lab). 1 Credit Hour.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1106. Introductory Chemistry I (Lab - allied health emphasis). 1 Credit Hour.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1107. Introductory Chemistry II (Lab). 1 Credit Hour.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1111. General Chemistry I (Lab). 1 Credit Hour.
(030) Basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.

CHEM 1112. General Chemistry II (Lab). 1 Credit Hour.
(030) Basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.

CHEM 1305. Introductory Chemistry I (Lecture). 3 Credit Hours.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1306. Introductory Chemistry I (Lecture - allied health emphasis). 3 Credit Hours.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1307. Introductory Chemistry II (Lecture). 3 Credit Hours.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1311. General Chemistry I (Lecture). 3 Credit Hours.
(030) Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure,.

CHEM 1312. General Chemistry II (Lecture). 3 Credit Hours.
(030) Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. Prerequisite(s): CHEM 1311 and CHEM 1111 or CHEM 1411 or CHEM 1309 and CHEM 1109 or CHEM 1409.

CHEM 1405. Introductory to Chemistry (Lecture + Lab). 4 Credit Hours.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1406. Introductory Chemistry I (Lecture + Lab - allied health emphasis). 4 Credit Hours.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1407. Introductory Chemistry II (Lecture + Lab). 4 Credit Hours.
(030) Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and allied health students.

CHEM 1411. General Chemistry I (Lecture + Lab). 4 Credit Hours.
(030) Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.

CHEM 1412. General Chemistry II. 4 Credit Hours.
(030) Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.

CHEM 2123. Organic Chemistry I (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies CHEM 2323, Organic Chemistry I. Laboratory activities will reinforce fundamental principles of organic chemistry, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Methods for the purification and identification of organic compounds will be examined.

CHEM 2125. Organic Chemistry II Lab. 1 Credit Hour.
(030) This laboratory-based course accompanies CHEM 2325, Organic Chemistry II. Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules.

CHEM 2323. Organic Chemistry I (Lecture). 3 Credit Hours.
(030) Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. THIS COURSE IS INTENDED FOR STUDENTS IN SCIENCE OR PRE-PROFESSIONAL PROGRAMS.

CHEM 2325. Organic Chemistry II (Lecture). 3 Credit Hours.
(030) Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. THIS COURSE IS INTENDED FOR STUDENTS IN SCIENCE OR PRE-PROFESSIONAL PROGRAMS.

CHEM 2423. Organic Chemistry I (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of CHEM 2323 (lecture) and CHEM 2123 (lab), including the learning outcomes listed for both courses.

CHEM 2425. Organic Chemistry II (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of CHEM 2325 (lecture) and CHEM 2125 (lab), including the learning outcomes listed for both courses.

CHIN 1411. Beginning Chinese I. 3 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

CHIN 2311. Intermediate Chinese I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

CHIN 2312. Intermediate Chinese II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

COMM 1307. Introduction to Mass Communication. 3 Credit Hours.
(010) (040) (050) (080) Survey of basic content and structural elements of mass media and their functions and influences on society.

COMM 1335. Introduction to Electronic Media. 3 Credit Hours.
(040) (050) (080) An overview of the development, regulation, economics, social impact, and industry practices in electronic media.

COMM 2300. Media Literacy. 3 Credit Hours.
(040) (050) Criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation of the media.

COMM 2366. Introduction to Cinema. 3 Credit Hours.
(040) (050) Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. (Cross- listed as DRAM 2366).

COSC 1301. Introduction to Computing. 3 Credit Hours.
Overview of computer systems—hardware, operating systems, the Internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science.

COSC 1309. Programming Logic & Design. 3 Credit Hours.
A discipline approach to problem-solving with structured techniques and representation of algorithms using pseudo code and graphical tools. Discussion of methods for testing, evaluation, and documentation.

COSC 1315. Fundamentals of Programming. 3 Credit Hours.
Introduction to computer programming for solving a variety of problems. This course is intended for non-computer science and non-computer engineering majors. Emphasis on the fundamentals of design, development, testing, implementation, and documentation of computer programs. Includes problem solving with structured techniques and algorithms using pseudo code and/or graphical representations.

COSC 1320. C Programming I. 3 Credit Hours.
Introduces the fundamental concepts of structured programming in the C language. Topics include data types; control structures; functions, structures, arrays, pointers, pointer arithmetic, unions, and files; the mechanics of running, testing, and debugging programs; introduction to programming; and introduction to the historical and social context of computing.

COSC 1336. Programming Fundamentals I. 3 Credit Hours.
This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy.

COSC 1337. Programming Fundamentals II. 3 Credit Hours.
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software.

COSC 1436. Programming Fundamentals. 4 Credit Hours.
This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.).

COSC 1437. Programming Fundamentals II. 4 Credit Hours.
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite(s): COSC 1336 or COSC 1436.

COSC 2325. Computer Organization. 3 Credit Hours.
The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Prerequisite(s): COSC 1336 or COSC 1436.

COSC 2425. Computer Organization. 4 Credit Hours.
The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Prerequisite(s): COSC 1336 or COSC 1436.

COSC 2436. Programming Fundamentals III. 4 Credit Hours.
Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite(s): COSC 1337 or COSC 1437.

CRIJ 1301. Introduction to Criminal Justice. 3 Credit Hours.
(080) This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes.

CRIJ 1306. Court Systems & Practices. 3 Credit Hours.
(080) This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law.

CRIJ 1307. Crime in America. 3 Credit Hours.
(080) American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime.

CRIJ 1310. Fundamentals of Criminal Law. 3 Credit Hours.
(080) This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability.

CRIJ 2313. Correctional Systems & Practices. 3 Credit Hours.
(080) This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues.

CRIJ 2314. Criminal Investigation. 3 Credit Hours.
Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation.

CRIJ 2328. Police Systems & Practices. 3 Credit Hours.
(080) This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority.

DANC 1305. World Dance. 3 Credit Hours.
(040) (050) A survey of dances from different cultures, their histories, and their influences on contemporary dance and society. Cultural origins, significance, motivations and techniques will be explored experientially.

DANC 2303. Dance Appreciation. 3 Credit Hours.
(050) A general survey of dance forms designed to create an appreciation of the vocabulary, techniques, and purposes of the creative process. This course includes critical interpretation and evaluations of choreographic works and dance forms within cultural and historical contexts.

DRAM 1310. Introduction to Theatre. 3 Credit Hours.
(050) Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required.

DRAM 2361. History of the Theater I. 3 Credit Hours.
(040) (050) Study of the history of the theater from primitive times through the Renaissance.

DRAM 2362. History of the Theater II. 3 Credit Hours.
(040) (050) Study of the history of the theater from the Renaissance through today.

DRAM 2366. Introduction to Cinema. 3 Credit Hours.
(050) Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. (Cross- listed as COMM 2366).

ECON 1301. Introduction to Economics. 3 Credit Hours.
(080) A survey of microeconomic and macroeconomic principles for non-business majors. Microeconomic topics will include supply and demand, consumer behavior, price and output decisions by firms under various market structures, factor markets, market failures, international trade, and exchange rates. Macroeconomic topics will include national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth.

ECON 2301. Principles of Macroeconomics. 3 Credit Hours.
(080) An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy.

ECON 2302. Principles of Microeconomics. 3 Credit Hours.
(080) Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade.

EDUC 1100. Learning Frameworks. 1 Credit Hour.
A study of the: research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as PSYC 1300).

EDUC 1200. Learning Frameworks. 2 Credit Hours.
A study of the: research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as PSYC 1300).

EDUC 1300. Learning Frameworks. 3 Credit Hours.
A study of the: research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as PSYC 1300).

EDUC 1301. Introduction to the Teaching Profession. 3 Credit Hours.
An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and the course must include a minimum of 16 contact hours of field experience in P-12 classrooms.

EDUC 2301. Introduction to Special Populations. 3 Credit Hours.
(080) An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P- 12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations.

ENGL 1301. Composition I. 3 Credit Hours.
(010) Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.

ENGL 1302. Composition II. 3 Credit Hours.
(010) Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.

ENGL 2311. Technical & Business Writing. 3 Credit Hours.
(010) Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents.

ENGL 2321. British Literature (single-semester course). 3 Credit Hours.
(040) (050) A survey of the development of British literature from the Anglo-Saxon period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

ENGL 2322. British Literature I. 3 Credit Hours.
(040) A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite(s): ENGL 1301.

ENGL 2323. British Literature II. 3 Credit Hours.
(040) A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

ENGL 2326. American Literature (single-semester course). 3 Credit Hours.
(040) (050) A survey of American literature from the period of exploration and settlement to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.

ENGL 2327. American Literature I. 3 Credit Hours.
(040) A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite(s): ENGL 1301.

ENGL 2328. American Literature II. 3 Credit Hours.
(040) A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite(s): ENGL 1301.

ENGL 2331. World Literature (single-semester course). 3 Credit Hours.
(040) (050) A survey of world literature from the ancient world to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

ENGL 2332. World Literature I. 3 Credit Hours.
(040) A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite(s): ENGL 1301.

ENGL 2333. World Literature II. 3 Credit Hours.
(040) A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

ENGL 2341. Forms of Literature. 3 Credit Hours.
(040) The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film.

ENGL 2351. Mexican American Literature. 3 Credit Hours.
(040) A survey of Mexican American/Chicanx literature from Mesoamerica to the present. Students will study literary works of fiction, poetry, drama, essays, and memoirs in relation to their historical, linguistic, political, regional, gendered, and cultural contexts. Texts will be selected from a diverse group of authors, literary movements, and media forms. Topics and themes may include the literary performance of identity and culture, aesthetic mediation of racialization, struggle and protest, and artistic activism. Prerequisite(s): ENGL 1301.

ENGR 1201. Introduction to Engineering. 2 Credit Hours.
An introduction to the engineering profession with emphasis on technical communications and team-based engineering design.

ENGR 1304. Engineering Graphics. 3 Credit Hours.
Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. Prerequisite(s): MATH 1314 or MATH 1414 or equivalent academic preparation.

ENGR 2301. Engineering Mechanics I - Statics. 3 Credit Hours.
Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia.

ENGR 2302. Engineering Mechanics II - Dynamics. 3 Credit Hours.
Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems.

ENGR 2304. Programming for Engineers. 3 Credit Hours.
Programming principles and techniques for matrix and array operations, equation solving, and numeric simulations applied to engineering problems and visualization of engineering information; platforms include spreadsheets, symbolic algebra packages, engineering analysis software, and laboratory control software.

ENGR 2305. Electrical Circuits I (Lecture). 3 Credit Hours.
Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff 's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first- and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems.

ENGR 2308. Engineering Economics. 3 Credit Hours.
(080) Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam. Prerequisite(s): MATH 2413.

ENGR 2332. Mechanics of Materials. 3 Credit Hours.
Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses.

ENGR 2405. Electrical Circuits I (Lecture + Lab). 4 Credit Hours.
Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation. Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff 's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first- and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Prerequisite(s): PHYS 2326 and PHYS 2126 or PHYS 2426; MATH 2414.

ENGT 2307. Engineering Materials I. 3 Credit Hours.
Instruction in the making and forming of steel and the classification of steel, cast iron, and aluminum. Topics include mechanical and physical properties, non-destructive testing principles of alloying, selection of metals, iron carbon diagrams, principles of hardening and tempering steel, and the metallurgical aspects of machining. Topics will also include an overview of properties and uses of polymers and ceramics. (This course is included in the Field of Study Curriculum for Engineering Technology.).

ENGT 2310. Introduction to Manufacturing Processes. 3 Credit Hours.
Exploration of a variety of methods used in manufacturing. Theory and application of processes including but not limited to metal forming, welding, machining, heat-treating, plating, assembly procedures, process controls considerations, casting and injection molding. (This course is included in the Field of Study Curriculum for Engineering Technology.).

ENVR 1101. Environmental Science I (Lab). 1 Credit Hour.
(030) This laboratory based course accompanies ENVR 1301, Environmental Science (lecture). Activities will cover methods used to collect and analyze environmental data. (Cross-listed as GEOL 1105 Environmental Science).

ENVR 1102. Environmental Science II (Lab). 1 Credit Hour.
(030) General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. May or may not include a laboratory.

ENVR 1301. Environmental Science I (Lecture). 3 Credit Hours.
(030) A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. (Cross-listed as GEOL 1305 Environmental Science).

ENVR 1302. Environmental Science II (Lecture). 3 Credit Hours.
(030) General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. May or may not include a laboratory.

ENVR 1401. Environmental Science I (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of ENVR 1301 Environmental Science (lecture) and ENVR 1101 Environmental Science (lab), including the learning outcomes listed for both courses. (Cross-listed as GEOL 1405 Environmental Science).

ENVR 1402. Environmental Science II (Lecture + Lab). 4 Credit Hours.
(030) General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. May or may not include a laboratory.

FREN 1311. Beginning French I. 3 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

FREN 1312. Beginning French II. 3 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

FREN 1411. Beginning French I. 4 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

FREN 1412. Beginning French II. 4 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

FREN 2311. Intermediate French I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

FREN 2312. Intermediate French II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

GEOG 1301. Physical Geography. 3 Credit Hours.
(030) (080) This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment.

GEOG 1302. Human Geography. 3 Credit Hours.
(040) (080) This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity.

GEOG 1303. World Regional Geography. 3 Credit Hours.
(080) This course is an introduction to the world's major regions seen through their defining physical, social, cultural, political, and economic features. These regions are examined in terms of their physical and human characteristics and their interactions. The course emphasizes relations among regions on issues such as trade, economic development, conflict, and the role of regions in the globalization process.

GEOL 1101. Earth Science for Non-Science Majors I (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies GEOL 1301, Earth Sciences I. Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography, and astronomy.

GEOL 1102. Earth Sciences for Non-Science Majors II (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies GEOL 1302, Earth Sciences II. Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability.

GEOL 1103. Physical Geology (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies GEOL 1303, Physical Geology. Laboratory activities will cover methods used to collect and analyze earth science data.

GEOL 1104. Historical Geology (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies GEOL 1304, Historical Geology. Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils.

GEOL 1105. Environmental Science I (Lab). 1 Credit Hour.
(030) This laboratory based course accompanies GEOL 1305, Environmental Science (lecture). Activities will cover methods used to collect and analyze environmental data. (Cross-listed with ENVR 1101).

GEOL 1145. Oceanography (Lab). 1 Credit Hour.
(030) Survey of oceanography and related sciences.

GEOL 1147. Meteorology (Lab). 1 Credit Hour.
(030) Survey of meteorology and related sciences.

GEOL 1301. Earth Science for Non-Science Majors I (Lecture). 3 Credit Hours.
(030) Survey of geology, meteorology, oceanography, and astronomy.

GEOL 1302. Earth Science for Non-Science Majors II (Lecture). 3 Credit Hours.
(030) Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability.

GEOL 1303. Physical Geology (Lecture). 3 Credit Hours.
(030) Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations.

GEOL 1304. Historical Geology (Lecture). 3 Credit Hours.
(030) A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils.

GEOL 1305. Environmental Science (Lecture). 3 Credit Hours.
(030) A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. (Cross-listed with ENVR 1301).

GEOL 1345. Oceanography (Lecture). 3 Credit Hours.
(030) Survey of oceanography and related sciences.

GEOL 1347. Meteorology (Lecture). 3 Credit Hours.
(030) Survey of meteorology and related sciences.

GEOL 1401. Earth Sciences for Non-Science Majors I (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) and GEOL 1101 Earth Sciences for Non-Science Majors I (lab), including the learning outcomes listed for both courses.

GEOL 1402. Earth Sciences for Non-Science Majors II (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of GEOL 1302 Earth Sciences for Non-Science Majors II (lecture) and GEOL 1102 Earth Sciences for Non-Science Majors II (lab), including the learning outcomes listed for both courses.

GEOL 1403. Physical Geology (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of GEOL 1303 Physical Geology (lecture) and GEOL 1103 Physical Geology (lab), including the learning outcomes listed for both courses.

GEOL 1404. Historical Geology (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of GEOL 1304 Historical Geology (lecture) and GEOL 1104 Historical Geology (lab), including the learning outcomes listed for both courses.

GEOL 1405. Environmental Science I (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of GEOL 1305 Environmental Science (lecture) and GEOL 1105 Environmental Science (lab), including the learning outcomes listed for both courses. (Cross-listed with ENVR 1401).

GEOL 1445. Oceanography (Lecture + Lab). 4 Credit Hours.
(030) Survey of oceanography and related sciences.

GEOL 1447. Meteorology (Lecture + Lab). 4 Credit Hours.
(030) Survey of meteorology and related sciences.

GERM 1311. Beginning German I. 3 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

GERM 1312. Beginning German II. 3 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

GERM 1411. Beginning German I. 4 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

GERM 1412. Beginning German II. 4 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

GERM 2311. Intermediate German I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

GERM 2312. Intermediate German II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

GOVT 2304. Introduction to Political Science. 3 Credit Hours.
(080) Introductory survey of the discipline of political science focusing on the scope, and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function.

GOVT 2305. Federal Government. 3 Credit Hours.
(070) Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights.

GOVT 2306. Texas Government. 3 Credit Hours.
(070) Origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.

GOVT 2311. Mexican American and Latinx Politics. 3 Credit Hours.
(080) The study of Mexican American and Latinx politics within the American political experience. Topics include historical, cultural, socioeconomic, and constitutional issues that pertain to the study of Mexican Americans and other Latinx populations in the United States. Other topics such as political participation, governmental institutions, electoral politics, political representation, demographic trends, and other contemporary public policy debates will also be addressed.

HECO 1322. Nutrition & Diet Therapy. 3 Credit Hours.
This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. (Cross-listed as BIOL 1322).

HIST 1301. United States History I. 3 Credit Hours.
(060) A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government.

HIST 1302. United States History II. 3 Credit Hours.
(060) A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.

HIST 2301. Texas History. 3 Credit Hours.
(060) (080) A survey of the political, social, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas.

HIST 2311. Western Civilization I. 3 Credit Hours.
(040) (080) A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations.

HIST 2312. Western Civilization II. 3 Credit Hours.
(040) (080) A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism.

HIST 2321. World Civilizations I. 3 Credit Hours.
(040) (080) A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange.

HIST 2322. World Civilizations II. 3 Credit Hours.
(040) (080) A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange.

HIST 2327. Mexican American History I. 3 Credit Hours.
(060) (080) A survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx. Periods include early indigenous societies, conflict and conquest, early European colonization and empires, New Spain, early revolutionary period, Mexican independence and nation building, United States expansion to the United States-Mexico War Era. Themes to be addressed are mestizaje and racial formation in the early empire, rise and fall of native and African slavery, relationship to early global economies, development of New Spain's/Mexico's northern frontier, gender and power, missions, resistance and rebellion, emergence of Mexican identities, California mission secularization, Texas independence, United States' wars with Mexico, and the making of borders and borderlands. (May be applied to U.S. History requirement.).

HIST 2328. Mexican American History II. 3 Credit Hours.
(060) A survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx. Periods include the United States-Mexico War Era, incorporation of Northern Mexico into the United States, Porfirian Mexico, and the nineteenth century American West, 1910 Mexican Revolution and Progressive Era, the Great Depression and New Deal, World War II and the Cold War, Civil Rights Era, Conservative Ascendancy, the age of NAFTA and turn of the 21st Century developments. Themes to be addressed are the making of borders and borderlands, impact of Treaty of Guadalupe Hidalgo, gender and power, migration and national identities, citizenship and expulsion, nineteenth century activism and displacement, industrialization and the making of a transnational Mexican working class, urbanization and community formation, emergence of a Mexican American Generation, war and citizenship, organized advocacy and activism, Chicano Movement, changing identifications and identities, trade and terrorism. (May be applied to U.S. History requirement.).

HIST 2381. African-American History. 3 Credit Hours.
(060) (080) Historical, economic, social, and cultural development of minority groups. May include African-American, Mexican American, Asian American, and Native American issues.

HIST 2382. African-American History II. 3 Credit Hours.
(060) A survey of the social, political, economic, cultural, and intellectual history of people of African descent in the United States from the Civil War/Reconstruction period to the present. African American History II examines segregation, disenfranchisement, civil rights, migrations, industrialization, world wars, the Harlem Renaissance and the conditions of African Americans in the Great Depression, Cold War and post-Cold War eras. This course will enable students to understand African American history as an integral part of U.S. history. (May be applied to the U.S. History requirement.).

HORT 1101. Horticulture Laboratory. 1 Credit Hour.
(030) This laboratory-based course accompanies HORT 1301. Laboratory activities will reinforce the structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. (Cross-listed as AGRI 1115).

HORT 1301. Horticulture (Lecture). 3 Credit Hours.
(030) Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. (Cross-listed as AGRI 1315).

HORT 1401. Horticulture (Lecture + Lab). 4 Credit Hours.
(030) This lecture and lab course should combine all of the elements of HORT 1301 Horticulture (lecture) and HORT 1101 Horticulture (lab), including the learning outcomes listed for both courses. (Cross-listed as AGRI 1415).

HUMA 1301. Introduction to Humanities I. 3 Credit Hours.
(040) (050) This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create.

HUMA 1302. Introduction to Humanities II. 3 Credit Hours.
(040) (050) This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create.

HUMA 1305. Introduction to Mexican American Studies. 3 Credit Hours.
(040) (050) This interdisciplinary survey examines the different cultural, artistic, economic, historical, political, and social aspects of the Mexican American/Chicano/a communities. It also covers issues such as dispossession, immigration, transnationalism, and other topics that have shaped the Mexican American experience.

HUMA 1311. Mexican American Fine Arts Appreciation. 3 Credit Hours.
(040) (050) This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, drama, and dance) and the ways in which they express the values of the Mexican-American/Chicano/a experience.

HUMA 1315. Fine Arts Appreciation. 3 Credit Hours.
(040) (050) This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, architecture, drama, and dance) and the ways in which they express the values of cultures and human experience.

HUMA 2319. American Minority Studies. 3 Credit Hours.
(040) This interdisciplinary survey examines the diverse cultural, artistic, economic, historical, political, and social aspects of American minority communities. Topics may include race/ethnicity, gender, socioeconomic class, sexual orientation, national origin, age, disability, and religion.

HUMA 2323. World Cultures. 3 Credit Hours.
(040) (050) This course is a general study of diverse world cultures. Topics include cultural practices, social structures, religions, arts, and languages.

ITAL 2311. Intermediate Italian I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

ITAL 2312. Intermediate Italian II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

ITSE 1402. Computer Programing. 4 Credit Hours.
Introduction to computer programming including design, development, testing, implementation, and documentation.

ITSE 2421. Object-Oriented Program. 4 Credit Hours.
Program design with classes, including development, testing, implementation, and documentation.

JAPN 1411. Beginning Japanese I. 4 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

JAPN 2311. Intermediate Japanese I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

JAPN 2312. Intermediate Japanese II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

KORE 2311. Intermediate Korean I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

KORE 2312. Intermediate Korean II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

LANG 1311. Foreign Language I. 3 Credit Hours.
These courses are intended to serve as generic foreign language credits for students in the International Baccalaureate Diploma program. They are for transcripting purposes only, and may not be submitted for state reimbursement.

LANG 1312. Foreign Language II. 3 Credit Hours.
These courses are intended to serve as generic foreign language credits for students in the International Baccalaureate Diploma program. They are for transcripting purposes only, and may not be submitted for state reimbursement.

LANG 1411. Foreign Language I. 4 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

LANG 1412. Foreign Language II. 4 Credit Hours.
Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

LANG 2311. Intermediate Language I. 3 Credit Hours.
Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. (This course does not meet the ACGM for core coursework, use specific foreign language coursework).

LANG 2312. Intermediate Language II. 3 Credit Hours.
Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. (This course does not meet the ACGM for core coursework, use specific foreign language coursework).

LATI 1411. Beginning Latin I. 4 Credit Hours.
Grammar and vocabulary. Emphasis on the value of Latin as a background for the study of English and modern foreign languages.

LATI 2311. Intermediate Latin I. 3 Credit Hours.
(040) Review of grammar and readings in Roman literary works.

LATI 2312. Intermediate Latin II. 3 Credit Hours.
(040) Review of grammar and readings in Roman literary works.

MATH 1314. College Algebra. 3 Credit Hours.
(020) In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

MATH 1316. Plane Trigonometry. 3 Credit Hours.
(020) In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included.

MATH 1324. Mathematics for Business & Social Sciences. 3 Credit Hours.
(020) The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

MATH 1325. Calculus for Business & Social Sciences. 3 Credit Hours.
(020) This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences.

MATH 1332. Contemporary Mathematics. 3 Credit Hours.
(020) Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered.

MATH 1342. Elementary Statistical Methods. 3 Credit Hours.
(020) Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.

MATH 1350. Mathematics for Teachers I. 3 Credit Hours.
(020) This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking.

MATH 1351. Mathematics for Teachers II. 3 Credit Hours.
(020) This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking.

MATH 1414. College Algebra. 4 Credit Hours.
(020) In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

MATH 1442. Elementary Statistical Methods. 4 Credit Hours.
(020) Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.

MATH 2305. Discrete Mathematics. 3 Credit Hours.
A course designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, countability and counting arguments, proof techniques, mathematical induction, combinatorics, discrete probability, recursion, sequence and recurrence, elementary number theory, graph theory, and mathematical proof techniques.

MATH 2312. Pre-Calculus Math. 3 Credit Hours.
(020) In-depth combined study of algebra, trigonometry, and other topics for calculus readiness.

MATH 2313. Calculus I. 3 Credit Hours.
(020) Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the hain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite tegration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

MATH 2314. Calculus II. 4 Credit Hours.
(020) Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

MATH 2315. Calculus III (3 credit hour version). 3 Credit Hours.
(020) Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Prerequisite(s): MATH 2414.

MATH 2318. Linear Algebra (3 credit hour version. 3 Credit Hours.
(020) Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. Prerequisite(s): MATH 2414.

MATH 2320. Differential Equations. 3 Credit Hours.
(020) Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems.

MATH 2412. Pre-Calculus Math. 4 Credit Hours.
(020) In-depth combined study of algebra, trigonometry, and other topics for calculus readiness.

MATH 2413. Calculus I. 4 Credit Hours.
(020) Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the hain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite tegration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

MATH 2414. Calculus II. 4 Credit Hours.
(020) Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

MATH 2415. Calculus III. 4 Credit Hours.
(020) Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem.

MATH 2418. Linear Algebra (4 credit hour version). 4 Credit Hours.
(020) Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. Prerequisite(s): MATH 2414.

MATH 2420. Differential Equations (4 credit hour version). 4 Credit Hours.
(020) Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems. Prerequisite(s): MATH 2414 must be the 4 credit hour version.

MUSI 1071. Student Recital. 0 Credit Hours.
Recital attendance credit for music majors and minors. Required of all music majors and minors. This course may be repeated for credit.

MUSI 1114. Piano Class for Music Majors I. 1 Credit Hour.
Class piano instruction for music majors with an emphasis on the practical application of music theory involving harmonization, transposition, and related keyboard skills.

MUSI 1115. Piano Class for Music Majors II. 1 Credit Hour.
Class piano instruction for music majors with an emphasis on the practical application of music theory involving harmonization, transposition, and related keyboard skills.

MUSI 1116. Sight Singing & Ear Training I. 1 Credit Hour.
Singing tonal music in treble and bass clefs, and aural study of elements of music, such as scales, intervals and chords, and dictation of basic rhythm, melody and diatonic harmony.

MUSI 1117. Sight Singing & Ear Training II. 1 Credit Hour.
Singing tonal music in various clefs, continued aural study of the elements of music, and dictation of intermediate rhythm, melody and diatonic harmony.

MUSI 1301. Fundamentals of Music I. 3 Credit Hours.
Introduction to the basic elements of music theory for non-music majors: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. (Does not apply to a music major degree.).

MUSI 1306. Music Appreciation. 3 Credit Hours.
(050) Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. (Does not apply to a music major degree.).

MUSI 1307. Music Literature. 3 Credit Hours.
(040) (050) A survey of the styles and forms of music as it developed from the middle ages to the present. This course will familiarize the student with cultural context, terminology, genres, and notation.

MUSI 1310. American Music. 3 Credit Hours.
(050) General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music.

MUSI 1311. Music Theory I. 3 Credit Hours.
The study of analysis and writing of tonal melody and diatonic harmony, including fundamental music concepts, scales, intervals, chords, 7th chords, and early four-part writing. Analysis of small compositional forms. Optional correlated study at the keyboard.

MUSI 1312. Music Theory II. 3 Credit Hours.
The study of analysis and writing of tonal melody and diatonic harmony, including all diatonic chords and seventh chords in root position and inversions, non-chord tones, and functional harmony. Introduction to more complex topics, such as modulation, may occur. Optional correlated study at the keyboard.

MUSI 2114. Piano Class III for Music Majors. 1 Credit Hour.
Continuation of Class Piano II, with emphasis on scales and arpeggios (hands together), harmonization, sight reading, score reading, ensemble, and simple accompanying.

MUSI 2115. Piano Class IV for Music Majors. 1 Credit Hour.
Continuation of Piano Class III with further study given to scales (including chromatic scale), arpeggios, broken chords, score reading, solo and ensemble performance, and accompanying.

MUSI 2116. Sight Singing & Ear Training III. 1 Credit Hour.
Singing more difficult tonal music in various clefs, aural study including dictation of more complex rhythm, melody, chromatic harmony, and extended tertian structures.

MUSI 2311. Music Theory III. 3 Credit Hours.
Advanced harmony voice leading, score analysis and writing of more advanced tonal harmony including chromaticism and extended-tertian structures. Optional correlated study at the keyboard.

MUSI 2312. Music Theory IV. 3 Credit Hours.
Continuation of advanced chromaticism and survey of analytical and compositional procedures in post-tonal music. Optional correlated study at the keyboard.

MUAP 3269. Private Lesson Instruction V. 2 Credit Hours.
This course is designed to provide individualized instruction in solo technique and repertoire for the musical performer. Prerequisite: 4 semesters of private instruction.

MUAP 3270. Private Lesson Instruction VI. 2 Credit Hours.
This course is designed to provide individualized instruction in solo technique and repertoire for the musical performer. Prerequisite: 5 semesters of private instruction.

MUAP 4269. Private Lesson Instruction VII. 2 Credit Hours.
This course is designed to provide individualized instruction in solo technique and repertoire for the musical performer. Prerequisite: 6 hours of private instruction.

MUAP 4270. Private Lesson Instruction VIII. 2 Credit Hours.
This course is designed to provide individualized instruction in solo technique and repertoire for the musical performer. Prerequisite: 7 semesters of private instruction; Corequisite: MUSI 4098 (Senior Recital) required.

MUEN 3121. Symphonic Band. 1 Credit Hour.
Rehearsal and performance of quality concert band literature from a variety of styles. Open to any student by audition only.

MUEN 3123. Orchestra. 1 Credit Hour.
Rehearsal and performance of quality orchestral literature from a variety of styles. Open to any student by audition only.

MUEN 3124. Jazz Ensemble. 1 Credit Hour.
Rehearsal and performance of quality jazz ensemble literature from a variety of styles. Open to any student by audition only.

MUEN 3142. Chorale. 1 Credit Hour.
Designed to give participants a challenging, stylized choral experience. Performs a wide variety of literature, emphasizing the more difficult choral works. Open to any student by audition.

PHED 1301. Foundations of Kinesiology. 3 Credit Hours.
(080) The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science, and sport. This course offers the student both an introduction to the knowledge base, as well as, information on expanding career opportunities.

PHED 1304. Personal.Community Health. 3 Credit Hours.
(030) (080) This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice healthy living, promote healthy lifestyles, and enhance individual well-being.

PHED 1306. First Aid. 3 Credit Hours.
Instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or sudden illness, and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency.

PHED 1338. Concepts of Physical Fitness. 3 Credit Hours.
This course is designed to familiarize students with knowledge, understanding and values of health related fitness and its influence on the quality of life emphasizing the development and implementation of fitness programs.

PHED 1346. Drug Use & Abuse. 3 Credit Hours.
(080) Study of the use, misuse and abuse of drugs and other harmful substances in today's society. Physiological, sociological, pharmacological and psychological factors will be emphasized.

PHIL 1301. Introduction to Philosophy. 3 Credit Hours.
(040) A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications.

PHIL 1304. Introduction to World Religions. 3 Credit Hours.
(040) A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam.

PHIL 2303. Introduction to Formal Logic. 3 Credit Hours.
(020) (040) (080) The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules.

PHIL 2306. Introduction to Ethics. 3 Credit Hours.
(040) The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value.

PHIL 2307. Introduction to Social & Political Philosophy. 3 Credit Hours.
(040) A study of major issues in social and political theory and/or the work of major philosophical figures in this area.

PHIL 2316. Classical Philosophy. 3 Credit Hours.
(040) Study of major philosophers and philosophical themes from the ancient through medieval periods.

PHIL 2321. Philosophy of Religion. 3 Credit Hours.
(040) A study of the major issues in the philosophy of religion such as the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil.

PHYS 1101. College Physics I (Lab). 1 Credit Hour.
(30) This laboratory-based course accompanies PHYS 1301, College Physics I. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving.

PHYS 1102. College Physics II (Lab). 1 Credit Hour.
(030) This laboratory-based course accompanies PHYS 1302, College Physics II. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.

PHYS 1103. Stars and Galaxies (Lab). 1 Credit Hour.
(030) Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory.

PHYS 1104. Solar System Laboratory. 1 Credit Hour.
(030) Study of the sun and its solar system, including its origin. May or may not include a laboratory.

PHYS 1105. Elementary Physics I (Lab). 1 Credit Hour.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1107. Elementary Physics II (Lab). 1 Credit Hour.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1110. Elementary Physics (single-semester course, lab). 1 Credit Hour.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1115. Physical Science I (Lab). 1 Credit Hour.
(030) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

PHYS 1117. Physical Science II (Lab). 1 Credit Hour.
(030) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

PHYS 1301. College Physics I (Lecture). 3 Credit Hours.
(030) Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Prerequisite(s): MATH 1314 or MATH 2312 or MATH 2412.

PHYS 1302. College Physics II (Lecture). 3 Credit Hours.
(030) Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Prerequisite(s): PHYS 1301 or PHYS 1401.

PHYS 1303. Stars and Galaxies (Lecture). 3 Credit Hours.
(030) Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory.

PHYS 1304. Solar System (Lecture). 3 Credit Hours.
(030) Study of the sun and its solar system, including its origin. May or may not include a laboratory.

PHYS 1305. Elementary Physics I (Lecture). 3 Credit Hours.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1307. Elementary Physics II (Lecture). 3 Credit Hours.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1310. Elementary Physics (single-semester course, lecture). 3 Credit Hours.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1315. Physical Science I (Lecture). 3 Credit Hours.
(030) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

PHYS 1317. Physical Science II (Lecture). 3 Credit Hours.
(030) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

PHYS 1401. College Physics I (Lecture + Lab). 4 Credit Hours.
(030) Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving.

PHYS 1402. College Physics II (Lecture + Lab). 4 Credit Hours.
(030) Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.

PHYS 1403. Stars and Galaxies (Lecture + Lab). 4 Credit Hours.
(030) Study of stars, galaxies, and the universe outside our solar system. May or may not include a laboratory.

PHYS 1404. Solar System (Lecture + Lab). 4 Credit Hours.
(030) Study of the sun and its solar system, including its origin. May or may not include a laboratory.

PHYS 1405. Elementary Physics I (Lecture + Lab). 4 Credit Hours.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors.

PHYS 1407. Elementary Physics II (Lecture + Lab). 4 Credit Hours.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1410. Elementary Physics (single-semester courser, lecture + lab). 4 Credit Hours.
(030) Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. May or may not include a laboratory.

PHYS 1415. Physical Science I (Lecture + Lab). 4 Credit Hours.
(030) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology.

PHYS 1417. Physical Science II (Lecture + Lab). 4 Credit Hours.
(030) Course, designed for non-science majors, that surveys topics from physics, chemistry, geology, astronomy, and meteorology. May or may not include a laboratory.

PHYS 2125. University Physics Laboratory I (Lab). 1 Credit Hour.
(030) Basic laboratory experiments supporting theoretical principles presented in PHYS 2325 involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports.

PHYS 2126. University Physics Laboratory II (Lab). 1 Credit Hour.
(030) Laboratory experiments supporting theoretical principles presented in PHYS 2326 involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports.

PHYS 2325. University Physics I. 3 Credit Hours.
(030) Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem solving.

PHYS 2326. University Physics II. 3 Credit Hours.
(030) Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics.

PHYS 2425. University Physics I. 4 Credit Hours.
(030) Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem solving. involving the principles and applications of classical mechanics, lab activities include harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports.

PHYS 2426. University Physics II. 4 Credit Hours.
(030) Principles of physics for science, computer science, and engineering majors, using calculus, lab activities: the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics.

PORT 2311. Intermediate Portuguese I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

PORT 2312. Intermediate Portuguese II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

PSYC 1300. Learning Framework. 3 Credit Hours.
A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as EDUC 1300).

PSYC 2301. General Psychology. 3 Credit Hours.
(080) General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.

PSYC 2306. Human Sexuality. 3 Credit Hours.
(080) This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives – biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom.

PSYC 2307. Adolescent Psychology. 3 Credit Hours.
(080) This course explores the physical, behavioral, mental, emotional, and social changes that accompany growth and development in adolescence. The purpose of this course is provide an overview of theories, research, issues, and applications related to adolescent development.

PSYC 2308. Child Psychology. 3 Credit Hours.
(080) This course will address psychological development from conception through middle childhood with references to physical, cognitive, social and personality changes. Students will examine the interplay of biological factors, human interaction, social structures and cultural forces in development.

PSYC 2314. Lifespan Growth & Development. 3 Credit Hours.
(080) Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death.

PSYC 2315. Psychology of Adjustment. 3 Credit Hours.
(080) Study of the processes involved in adjustment of individuals to their personal and social environments.

PSYC 2316. Psychology of Personality. 3 Credit Hours.
(080) Study of various approaches to determinants, development, and assessment of personality.

PSYC 2317. Statistical Methods in Psychology. 3 Credit Hours.
(020) (080) This course covers descriptive and inferential statistics used in psychological research and assessment. It includes measurement, characteristics of distributions; measures of central tendency and variability; transformed scores; correlation and regression; probability theory; and hypotheses testing and inference. (PSYC 2317 is included in the Psychology Field of Study.) Prerequisite(s): PSYC 2301 MATH 1314.

PSYC 2319. Social Psychology. 3 Credit Hours.
(080) Study of individual behavior within the social environment. Topics may include socio-psychological processes, attitude formation and change, interpersonal relations, group processes, self, social cognition, and research methods. (PSYC 2319 is included in the Psychology Field of Study.).

PSYC 2320. Abnormal Psychology. 3 Credit Hours.
This course provides an introduction to the psychological, biological, and socio-cultural factors involved in the development, diagnosis, and treatment of psychological disorders. It includes a review of the historical understanding of abnormal behavior and the development of modern diagnostic systems. It includes discussion of psychological research and practice as it relates to mental health and psychological functioning, as well as legal and ethical issues. (PSYC 2320 is included in the Psychology Field of Study.) Prerequisite(s): PSYC 2301.

PSYC 2330. Biological Psychology. 3 Credit Hours.
An introduction to the biological bases of behavior. Topics include evolution, genetics, research methods in behavioral neuroscience, motivation and emotion, sensation and perception, learning and memory, lifespan development, cognition, psychological disorders, and other complex behaviors. (PSYC 2330 is included in the Psychology Field of Study.) Prerequisite(s): PSYC 2301.

RUSS 1411. Beginning Russian I. 4 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

RUSS 1412. Beginning Russian II. 4 Credit Hours.
(040) Fundamental skills in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.

RUSS 2311. Intermediate Russian I. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

RUSS 2312. Intermediate Russian II. 3 Credit Hours.
(040) Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture.

SGNL 1401. Beginning American Sign Language I. 4 Credit Hours.
Introduction to American Sign Language covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired.

SGNL 1402. Beginning American Sign Language II. 4 Credit Hours.
Introduction to American Sign Language covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired.

SGNL 2301. Intermediate American Sign Language I. 3 Credit Hours.
(040) Review and application of conversational skills in American Sign Language; interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore.

SGNL 2302. Intermediate American Sign Language II. 3 Credit Hours.
(040) Review and application of conversational skills in American Sign Language; interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore.

SOCI 1301. Introduction to Sociology. 3 Credit Hours.
(080) The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.

SOCI 1306. Social Problems. 3 Credit Hours.
(080) Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems.

SOCI 2301. Marriage & the Family. 3 Credit Hours.
(080) Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society.

SOCI 2306. Human Sexuality. 3 Credit Hours.
(080) This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives – biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom. (Cross-listed as PSYC 2306).

SOCI 2319. Minority Studies. 3 Credit Hours.
(040) (080) This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion.

SOCI 2326. Social Psychology. 3 Credit Hours.
(080) Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processe.

SOCI 2336. Criminology. 3 Credit Hours.
(080) The course surveys various theories of crime, with an emphasis on understanding the social causes of criminal behavior. The techniques for measuring crime as a social phenomenon and the characteristics of criminals are examined. This course addresses crime types (such as consensual or white-collar crimes), the criminal justice system, and other social responses to crime.

SOCI 2340. Drug Use & Abuse. 3 Credit Hours.
(080) Study of the use and abuse of drugs in today's society. Emphasizes the physiological, sociological, and psychological factors.

SOCW 2361. Introduction to Social Work. 3 Credit Hours.
(080) An overview of the history and development of social work as a profession. The course is designed to foster a philosophical, historical, and critical understanding of the social work profession, including social work values, ethics, and areas of practice utilized under a Generalist Intervention Model. (SOCW 2361 is included in the Social Work Field of Study.).

SOCW 2362. Social Welfare: Legislation, Programs, and Services. 3 Credit Hours.
(080) This course offers a historical and contemporary examination of legislation and resulting programs, policies, and services in the context of the social welfare system in the United States. Special attention is given to the political, economic, environmental, and social conditions that prompted the development of legislation to meet the needs of vulnerable populations. Societal responses to legislation are also considered. (SOCW 2362 is included in the Social Work Field of Study.).

SOCW 2389. Academic Cooperative. 3 Credit Hours.
introductory exposure to the field of social work. In conjunction with individual study and/or seminars, the student will set specific goals and objectives in the study of social work and/or social institutions. The academic cooperative is not a social work skills-based practice experience, but instead, an observational volunteer experience. The course must include a minimum of 80 contact hours (48 hours in a social service setting). (SOCW 2389 is included in the Social Work Field of Study.) Prerequisite(s): SOCW 2361.

SPAN 1311. Beginning Spanish I. 3 Credit Hours.
Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level.

SPAN 1312. Beginning Spanish II. 3 Credit Hours.
Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level.

SPAN 1411. Beginning Spanish I. 4 Credit Hours.
(040) Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level.

SPAN 1412. Beginning Spanish II. 4 Credit Hours.
(040) Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level.

SPAN 2311. Intermediate Spanish I. 3 Credit Hours.
(040) The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

SPAN 2312. Intermediate Spanish II. 3 Credit Hours.
(040) The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

SPAN 2313. Spanish for Native/Heritage Speakers I. 3 Credit Hours.
(040) Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

SPAN 2315. Spanish for Native/Heritage Speakers II. 3 Credit Hours.
(040) Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

SPCH 1311. Introduction to Speech Communication. 3 Credit Hours.
(010) Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.

SPCH 1315. Public Speaking. 3 Credit Hours.
(010) Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations.

SPCH 1318. Interpersonal Communication. 3 Credit Hours.
(010) (080) Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors.

SPCH 1321. Business & Professional Communication. 3 Credit Hours.
(010) Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams and technologically mediated formats.

SPCH 2341. Oral Interpretation. 2341 Credit Hours.
(050) Theories and techniques in analyzing and interpreting literature. Preparation and presentation of various literary forms.

TECA 1303. Families, School, & Community. 3 Credit Hours.
(080) A study of the child, family, community, and schools, including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. 241 Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences.

TECA 1354. Child Growth & Development. 3 Credit Hours.
(080) A study of the physical, emotional, social, language, and cognitive factors impacting growth and development of children through adolescence.