ART 103 - Introduction to the Visual Arts
(3 cr) An introductory course designed to give insight into the nature of the visual arts and their relationship to contemporary life. Includes a study of the language and functions of painting, sculpture, and architecture. The development of styles, aesthetic principles, and the ideas of art are surveyed. Students are introduced to movements, western and non-western, in the history of art that have a strong influence on contemporary art.

ART 115 - Drawing I
(3 cr) An introductory course for development of basic drawing skills and practice in the use of various drawing materials. Observation, memory training, and composition are stressed to give the student a wide experience and solid base in the art of drawing.

ART 140 - Visual Thinking Skills I
(3 cr) This course is designed to help students transition toward a rewarding career in the arts and fulfillment in developing the skills and knowledge to lead a productive and useful life that includes physical, mental, and intellectual well-being. A corequisite or prerequisite for all 200-level and above studio and art history classes. All students pursuing a major or minor in art must enroll in this course during the fall semester upon acceptance into a program in the Department of Contemporary Art and Theater. This introductory course examines the concepts and nature of visual image making while exploring ideas associated with contemporary art making including physical, emotional, intellectual, social, spiritual, and environmental concerns. The student begins to comprehend contemporary art and the function of the visual elements and principles of design to communicate concepts and ideas in a nonliteral way. Students utilize symbol and metaphor and develop problem-solving skills essential to creative thinking while learning more about themselves as individuals and artists.

ART 230 - Painting I
(3 cr) An introduction to the materials, philosophies, techniques, and processes of the painter. Students will work with acrylic paint and mediums and will approach the creative experience of painting through the study of subject matter, form, and content. Color theory, sketching, and different painting techniques and styles will be emphasized.

ART 250 - Sculpture I
(3 cr) An introduction to the materials, philosophies, techniques, and processes of the sculptor. Sculpture is approached as a creative experience involving traditional methods and concepts as well as those of the contemporary sculptor.

ART 260 - Printmaking I
(3 cr) Students are introduced to non-toxic relief processes, intaglio processes, and monoprint or monotype processes of printmaking. Half of the semester is devoted to developing skills and vocabulary of relief processes; the other half of the course is devoted to monoprint techniques and intaglio-type. With each process the student explores the use of value, line texture, and color to create visual images utilizing innovative non-toxic as well as traditional printmaking techniques in relief and intaglio.
GRDS 200 - Design Process and Form
(3 cr) This course provides the student with a comprehensive overview of the design field including principles, process, and practice. Students will work both by hand and digitally to complete projects and exercises that encourage the exploration of different design applications. Throughout the course, the student will sharpen problem-solving skills, develop technical skills using professional design software, understand the design process, and learn craft-making techniques. *Previously titled Introduction to Graphic Design.*

PHOT 281 - Basic Photography
(3 cr) Fundamentals of black and white photography and darkroom techniques. Topics include basic film processing and printing; basic lighting and exposure selection; composition; and visual thinking.

THEA 204 - Introduction to Theater
(3 cr) Develops an appreciation and understanding of theater as a fine art through normal lecture and attendance at live theater productions. Emphasis on the artists of the theater including playwrights, directors, designers, and actors.

BADM 150 - Introduction to Business
(3 cr) A survey designed to acquaint the student with administration, production, labor, control, distribution, finance, taxation, law, and ethics as applied to business. Includes a brief history of business and the organization of business. For non-majors. Does not carry business administration credit toward the B.S. in business administration or hotel-motel and restaurant management.

COMM 202 - Fundamentals of Speech
(3 cr) A required course for all students with focus upon the skills of sending and receiving clear messages. Audience analysis, the organization of the message, listening awareness, and the management of communication apprehension are foremost among the course objectives. Students participate in communication exercises and deliver a variety of speeches of different formats.

COMM 203 - Communication and New Media
(3 cr) New media are changing the ways we live and work. Communication professionals must be fluent across media platforms and ready to embrace perpetual change. Communication and New Media is a course that examines media technologies and their cultural implications. The course is designed to provide students with a survey of the field and an introduction to digital media production and media literacy.

COMM 360 – T.V. Production
(3 cr) A course in video production that investigates the theory and practice of studio productions, such as news and talk shows. Attention will be given to directing and producing audio and camera for multi-camera production.

CIS 102 - Microcomputer Applications
(3 cr) A survey of computer hardware, software, and Internet/Web social and ethical implications of the use and misuse of the computer. Hands-on experiences with software applications such as word processing, spreadsheets, and databases.
CIS 104 - Introduction to Computer and Information Sciences
(3 cr) Provides an overview of the wide range of topics in computer and information sciences. Topics include computer number systems and theory of computation, computer hardware and organization, computer languages, programming, compilation, systems analysis and design, decision support, artificial intelligence, as well as ethical, global, and social issues. Prerequisite/corequisite: MATH 105, or math placement.

DATA 118 - Data Analytics Introduction
(3 cr) This course introduces data analytics majors to concepts, methods and tools that they will explore in greater depth in later courses. Topics will include programming language concepts, reading and writing files, data file types, data structures, the linux operating environment, visualization, data cleansing, relevant mathematics and statistics, and sources of interesting data sets. The course will explore the historical context, current relevance, and future growth of data analytics.

ECON 123 - Contemporary Economics
(3 cr) Introductory survey of modern economic issues. Economic theory is employed in the analysis of inflation, unemployment, pollution, regulation, market structure, and related topics. Economic institutions such as corporations, banking, and government are also studied. Students cannot receive credit for ECON 123 after completing ECON 205 and ECON 206.

ECON 205 - Principles of Macroeconomics
(3 cr) Introduction to fundamental economic concepts including production possibilities and economic growth, market supply and demand analysis, money, banking, and government fiscal and monetary policies. Emphasis is placed upon fluctuations in national income, employment, and the price level. Prerequisites: Qualifying Mathematics placement scores of ACT 19 or SAT 460; or MATH 101 or higher.

ECON 206 - Principles of Microeconomics
(3 cr) Continuation of ECON 205. Topics include extension of supply and demand analysis, production costs and revenue analysis of firms under perfect and imperfect competition, resource markets, and international trade and finance. Selected economic problems. Prerequisites: ECON 205.

ENGR 101 - Engineering I
(3 cr) Topics include developing engineering design and problem-solving techniques including group projects and team work, basic engineering design concepts; spreadsheet programming; MathLab, dimensional analysis, use of computer, data, analysis, design, design process, visualization, material science, vector analysis, technical report writings and engineering ethics, professional and ethical responsibilities; and technical library and internet research. Prerequisites: MATH 108.
ENGR 102 - Engineering II  
*(3 cr)* Topics include an introduction to computing environments for solving engineering problems including computer-aided engineering (CAE), mathematical packages, and structured programming processes including algorithms, pseudo code, and editing and debugging with the C++ programming language. Applications include topics from numerical analysis and graphical representations. Corequisite: MATH 207.

ENGL 101 - Writing and Rhetoric I  
*(3 cr)* Follows one or more related themes including writing, literacy, and/or rhetoric. The goal of this course is to provide students the rhetorical tools to navigate the discourse communities of the university and beyond. This course introduces students to the idea of writing both as a course of study and as a social practice and helps them become flexible writers in a world with increasingly diverse means of communication. Students will study and practice the writing process of academic and public genres and will gain a range of experiences as they learn to write for different audiences. They will not only read the works of published writers but will also read and examine each other’s writing. *Previously titled “Written English”.* Prerequisites: Satisfactory score on appropriate placement tests.

ENGL 102 - Writing and Rhetoric II  
*(3 cr)* Builds on the work completed in ENGL 101 and focuses on a single, thematic rhetorical, cultural, and/or social issue. This course develops students’ fluency with a research process appropriate to various rhetorical tasks, including open, secondary research and, possibly, primary research methods such as ethnography. Students continue to write in multiple academic and public genres for different audiences, though these genres may be more complex and may require greater fluency of rhetoric and its aims. To prepare them for a world of digital communication, students are exposed to reading and/or composing multimodal texts in this course. As with ENGL 101, students will not only read the words of published writers but will also read and examine each other’s writing. Prerequisites: C or better in ENGL 101.

FREN 101 - Elementary French I  
*(3 cr)* A basic, culturally-oriented course in conversational French designed for beginning students who wish to develop skills in speaking, reading, writing, and comprehending French. Emphasis is placed on oral communication through dialogue and guided compositions. An online workbook provides additional practice in writing and listening.

FREN 102 - Elementary French II  
*(3 cr)* A continuation of FREN 101, this course allows students to strengthen their comprehension and speaking proficiency in French by providing extensive practice in oral and written communication and self-expression and through discussions of French texts. Prerequisites: FREN 101.

GERM 101 - Elementary German I  
*(3 cr)* The study of fundamentals of the German language, with emphasis on pattern exercises, questions and answers, reading and discussion of stories and German dialogue; also pronunciation during classes and listening during required laboratory hours to CDs, videos, and tapes in German.
GERM 102 - Elementary German II
(3 cr) A continuation of GERM 101. Discussion and conversation in German, also extensive study of regular and irregular verbs, idioms, and readings in German prose and poetry. Prerequisites: GERM 101.

SPAN 101 - Elementary Spanish I
(3 cr) A basic, culturally-oriented course in conversational Spanish designed for beginning students who wish to develop skills in speaking, reading, writing, and comprehending Spanish. Emphasis is placed on oral communication through dialogue and guided compositions. Audio and video tapes of Spain and Mexico are extensively used.

SPAN 102 - Elementary Spanish II
(3 cr) A continuation of SPAN 101, this course allows students to strengthen their comprehension and speaking proficiency in Spanish by providing extensive practice in oral and written communication and self-expression and thorough discussions and oral presentations of readings in the culture of Spain, Mexico, Central America, and South America. Prerequisites: SPAN 101.

GEOG 105 - World Cultural Geography
(3 cr) A survey of human populations in their natural environments by the study of physical and cultural geographic components such as climate, landforms, culture, migration, settlement, economic activities, and global interconnectedness. Emphasis on geographic skills development through the use of maps, models, and satellite imagery.

GEOG 202 - World Regions
(3 cr) In-depth analysis of world regions including physical and cultural geographic elements, human-land relationships, economic patterns, transportation and communication, urban systems, political patterns, and contemporary issues. Emphasis on geographic skills development through the use of maps, data, and comparative case studies.

HIST 100 - History of Civilization: Asian Traditions
(3 cr) The course covers the histories of East, Southeast, and South Asia from the inception of civilizations to approximately 1700 AD. It focuses on both political and cultural development within these regions. Fulfills Core Curriculum Tier One History requirement.

HIST 103 - History of Civilization: the Modern World
(3 cr) A survey of the French Revolution and its aftermath, of liberalism, nationalism, industrialization, materialism, and imperialism. The student will investigate 20th-century wars, international organizations, and global interactions in the post-colonial world.
HIST 124 - The Atlantic World, 1450-1850
(3 cr) This course surveys the Atlantic World from the beginnings of the European exploration and imperialism in the mid-1400s through the revolutions of the 18th and 19th centuries that liberated nearly all of the western hemisphere from imperial domination. It focuses on how four continents (Europe, Africa, and the Americas) engaged with one another in new ways that shaped the lives of millions of people.

HIST 128 - The Age of Revolution, 1750-1950
(3 cr) This course surveys world political, social, economic, cultural, and intellectual history from the Enlightenment to the beginning of the Cold War. It places special emphasis on the history of ideas and their political application, the social and economic changes spawned by the Industrial Revolution, the development of modern culture, the changing face of government, and the history of international relations.

HIST 130 - World History in the 20th Century
(3 cr) This course surveys the social, cultural, political and economic history of the world during the twentieth century. It examines Western imperialism and how it shaped global cultures, economies, and conflicts, and also its demise brought on by the independence movements of colonized peoples. We will explore the competing ideologies that fueled events during the twentieth century, including capitalism, socialism, fascism, totalitarianism, feminism, and democracy.

HLTH 100 - Exercise Leadership
(3 cr) A practical introduction to the skills necessary for students preparing to enter a career in health and fitness. Students will learn how to supervise exercise programs, teach exercise techniques, prepare and administer group exercise classes, promote healthy lifestyle changes, and motivate participants.

MATH 101 - Fundamentals of Mathematics
(3 cr) This course is an extensive review of the properties of integers, fractions, decimals, and rational numbers. Topics will include the Euclidean algorithm, polynomials and operations on polynomials, irreducible versus reducible polynomials factoring, Bézout’s theorem, the division algorithm, long division, geometric sequence as an application, simplifying expressions involving polynomials, revisiting the basic algorithms of arithmetic using the concept of polynomials, different number bases and operations, solving first and second degree equations, relationship between factoring and finding roots, solving first and second degree polynomial inequalities, graphic representation of inequalities and equations, interval notation including unions of intervals, exponential notation, laws of exponents, working with exponents and simplifying expressions using exponents, and solving systems of equations in two unknowns. Prerequisites: ACT Mathematics score 19 or SAT Mathematics score 460, or satisfactory ACCUPLACER placement.
MATH 105 - College Algebra
(3 cr) Topics in college algebra include properties of the real numbers; radicals and rational exponents; operations on polynomials and rational expressions; solution of linear and quadratic equations and inequalities; functions, including graphs and composite functions; properties of linear functions; and systems of two linear equations and inequalities. Prerequisites: MATH 101 or equivalent (MATH 101A and MATH 101B), or satisfactory placement score.

MATH 108 - Precalculus
(4 cr) Topics in algebra which will prepare students for the study of calculus, including complex numbers, graphs of nonlinear functions and relations, conic sections, graphical and algebraic solutions of nonlinear equations, solutions of exponential and logarithmic equations, introduction to analytic geometry, sequences, series, summations, and mathematical induction, and topics including trigonometry functions and identities, and inverse trigonometric functions. Prerequisites: MATH 105 or satisfactory placement score of ACT Math 22 or SAT Math 510 (old exam) or 540 (new exam).

MATH 207 - Calculus I
(4 cr) Fundamental concepts of calculus, using analytic geometry. After preliminaries about the real number system, intervals, and functions, properties of limits are carefully stated. These are used to develop standard differentiation formulas. Applications of the derivative (as a rate of change) are stressed in a wide variety of problems. Introduction to integration via anti-differentiation and area and the fundamental theorem. Applications of the integral (volumes, arc length, surface area, etc.) Prerequisites: MATH 108 or satisfactory math placement score.

MATH 208 - Calculus II
(4 cr) Continuation of MATH 207. Calculus of exponential, logarithmic, and trigonometric functions; techniques of integration. Review of conic sections in standard form and in rotation. Polar coordinates l’Hôpital’s rule, improper integrals, infinite series, and Taylor series. Prerequisites: MATH 207.

MUSC 103 - Music Theory I
(3 cr) This four-semester sequence of courses (MUSC 103, 105, 203, 205) is designed to provide the student with a fundamental grounding in the theoretical, analytical, and stylistic aspects of Western music. The focus of this course is upon the acquisition of skills in the notation, analysis, and construction of music as it developed from the 17th through the 20th centuries.

MUSC 104 - Aural Skills I
(1 cr) This four-semester sequence of courses (MUSC 104, 106, 204, 206) is designed to develop the aural perception skills of the music student in the identification and performance of intervals, chords, rhythms, and harmonic sequences. Prerequisites: Declared music major or minor, or permission of instructor. Corequisite: Concurrent enrollment in MUSC 103 is recommended.
MUSC 105 - Theory II
(3 cr) This four-semester sequence of courses (MUSC 103, 105, 203, 205) is designed to provide the student with a fundamental grounding in the theoretical, analytical, and stylistic aspects of Western music. The focus of this course is upon the acquisition of skills in the notation, analysis, and construction of music as it developed from the 17th through the 20th centuries.

MUSC 106 - Aural Skills II
(1 cr) See MUSC 104. Prerequisites: MUSC 104. Concurrent enrollment in MUSC 105 is recommended.

Political Science

PSCI 100 - Politics and Government
(3 cr) A consideration of concepts and issues essential to the understanding and study of politics. Classical and modern theories of the political system, including communism, fascism, democracy, and socialism are examined in an American and international context including study of specific nations. The approach of this course will be both empirical and normative.

PSCI 101 - American Federal Government
(3 cr) A study of the functions and administration of the government of the United States.

GLBL 200 - Introduction to Global Studies
(3 cr) This course will introduce students to interdisciplinary analyses of contemporary global issues and problems, such as social and economic inequalities, war, terrorism, globalization, and sustainability. The analyses will include historical, cultural, geographical, ecological, economic, political, and other perspectives. Students will be familiarized with major international organizations such as the United Nations and World Bank. The course may include field trips and guest speakers.

Psychology

PSYC 101 - Introduction to Psychology
(3 cr) A survey course introducing the core areas of psychology, including biopsychology, learning and memory, intelligence, developmental psychology, stress and health, personality, abnormal psychology, psychotherapy, and social psychology.

Recreation and Sport Studies

RECR 108 - Introduction to Sport Studies
(3 cr) For students who want to enter the world of fitness or athletics as a professional as opposed to a classroom teacher.

Science

BIOL 103 - General Biology
(4 cr) Not for biology majors. With BIOL 104, satisfies Core Curriculum lab science requirement. Integrated approach to the biology of plants, animals, and microorganisms. Half of the course is centered around ecological principles, and the other half is centered around organismic homeostatic (regulatory) principles. Laboratory topics and sequence are integrated with lecture. Previously BIOL 101-General Biological Science.
BIOL 104 - General Biology
(4 cr) Not for biology majors. With BIOL 103, satisfies Core Curriculum lab science requirement. Integrated approach to the biology of plants, animals, and microorganisms. Half of the course is centered around reproductive principles bearing on evolution, and the other half is centered around cell physiology. Laboratory topics and sequence are integrated with lecture. *Previously BIOL 102-General Biological Science.*

BIOL 211 - Fundamentals of Biology I: Molecular and Cellular Function
(4 cr) This introductory course for science majors covers the fundamental principles of biochemistry, genetics, molecular biology and cell biology that apply to all living organisms. Topics addressed in this course include metabolism, cell and membrane function, cellular respiration, photosynthesis, cell cycle, meiosis, classical and molecular genetics, and evolution.

BIOL 212 - Fundamentals of Biology II: Diversity of Life
(4 cr) This introductory course for science majors explores the diversity of life and organismal biology. Topics addressed in this course include microbial diversity and physiology; plant and animal diversity, growth, reproduction and physiology; and ecology.

CHEM 207 - General Chemistry I
(3 cr) CHEM 207 and its companion lab, CHEM 207L, are the first part of a two-semester sequence that serves as an introduction to modern chemistry for students majoring in the sciences. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include measurements and units, atomic and molecular structure, periodic properties of the elements, chemical bonding, stoichiometry, chemical reactivity, thermochemistry, and the structure and properties of gases, liquids and solids. This course, along with CHEM 207L, CHEM 209, and CHEM 209L, fulfills the Core Curriculum Laboratory Sciences requirement.

CHEM 207L - General Chemistry I Laboratory
(1 cr) CHEM 207L is a laboratory course that is designed to accompany CHEM 207. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include measurements and units, basic laboratory techniques, quantitative analysis, qualitative analysis, spectrophotometric analysis, gravimetric analysis, stoichiometry, thermochemistry and chromatography. This course, along with CHEM 207, CHEM 209, and CHEM 209L, fulfills the Core Curriculum Laboratory Sciences requirement.

CHEM 209 - General Chemistry II
(3 cr) CHEM 209 and its associated lab, CHEM 209L, are the second part of a two-semester sequence that serves as an introduction to modern chemistry for students majoring in the sciences. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include equilibrium, acid-base chemistry, solutions and solubility, electrochemistry, chemical kinetics, nuclear chemistry and an introduction to organic chemistry. This course, along with CHEM 207, CHEM 207L, and CHEM 209L, fulfills the Core Curriculum Laboratory Sciences requirement. Prerequisites: CHEM 207.
CHEM 209L - General Chemistry II Laboratory  
(1 cr) CHEM 209L is a laboratory course that is designed to accompany CHEM 209. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include volumetric analysis, chromatography, spectroscopy, acid-base chemistry, electrochemistry, colligative properties and organic and inorganic synthesis. This course, along with CHEM 207, CHEM 207L, and CHEM 209, fulfills the Core Curriculum Laboratory Sciences requirement. Prerequisites: CHEM 207 and CHEM 207L.

ENVS 201 - Foundations In Environmental Science I  
(3 cr) This course introduces fundamental concepts in environmental studies, with specific focus on human impacts on ecosystem function and biotic interactions. Students explore interactions between humans and earth's biotic resources, examining topics such as ecosystem conservation, population growth and regulation, food production and pest control. Anthropogenic environmental issues such as biodiversity decline, soil degradation and environmental toxicology and related governmental policies are explored within a social framework that considers both the different environmental impacts and experiences of humans based on geographical region and culture.

ENVS 201L - Foundations In Environmental Science I Lab  
(1 cr) A two hour per week laboratory course focusing on field techniques, equipment and scientific methodologies used in environmental studies, including such topics as microscopy, organism classification, experimental design and interpretation, ecological footprints, biodiversity and food web analysis.

ENVS 202 - Foundations In Environmental Science II  
(3 cr) This course introduces fundamental concepts in environmental studies, with specific focus on energy, earth systems and human resource utilization. Students explore interactions between humans and earth's abiotic resources, examining topics such as natural resource extraction, renewable and non-renewable energy production, hydrologic resource use and associated global environmental impacts. Human-induced environmental issues such as global climate change, non-renewable resource consumption and toxic and solid waste production are discussed, as well as key governmental policies around these issues. Concepts are framed within a social context that reveals how humans of different cultures and geographical regions both contribute to and experience various environmental problems differentially. Previously titled Dimensions of Environmental Science II (4cr).

ENVS 202L - Foundations In Environmental Science II Lab  
(1 cr) A two hour per week laboratory course focusing on field techniques, equipment and scientific methodologies used in environmental studies, including topics such as scientific measurements, energy conversions and calculations, use of topographic maps, compass, and multimeter, water quality analysis, electrical generators, solar and wind power.

SIGN 101 – Conversational Sign Language I  
(3 cr) This course involves both the teaching of the American Sign Language (ASL) as a skill to be acquired by the student in both the receptive and signing modes, and the development of a knowledge of cultural differences between deaf and hearing people. A further objective of the course is to have the student experience at least one social situation frequented by people who are deaf.
Sociology

**SOCI 203 - General Sociology**

*(3 cr)* This course introduces the student to the concepts and theories that pertain to social relationships and social organization. The course covers topics that range from micro interpersonal relationships to macro social structures. The course is a prerequisite for all other courses in sociology and/or social welfare.

Shepherd

**UNIV 100 – College Prep**

*(1cr)* A college preparatory course offered for high-school juniors and seniors through the Dual Enrollment Program. This dynamic learning experience rooted in academic achievement, personal growth, and college exploration will help high school students learn valuable skills to prepare them for college success.

**UNIV 100 – College Prep – Non-Native English Speakers**

*(1 cr)* A college preparatory course offered for high-school juniors and seniors through the Dual Enrollment Program. This course will integrate non-native English speaking students into the life and culture of Shepherd University and prepare them with the foundations for college-level academic success. The course will address campus resources, the meaning, purpose, and value of four-year college degree programs and education, engage students in higher-level and critical thinking, improve information literacy (research) skills, and improve communication in the English language through written, spoken, and listening activities. Students will also gain a greater understanding of human diversity and individual health and well-being.