ACA 122. College Transfer Success. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-2.0. Work-0.0

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions.

Pathways: Arts Transfer, Science Transfer, Engineering

ART 111. Art Appreciation. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. Students seeking to take this course to meet the college transfer humanities requirement may also take ART-114 or ART-115 (no ART prerequisites); Concepts related to media and technique will be introduced.

Pathways: Arts Transfer, Science Transfer, Engineering

ART 114. Art History Survey I. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. Students seeking to take this course to meet the college transfer humanities requirement may also take ART-111 or ART-115 (no ART prerequisites).

Pathways: Arts Transfer, Science Transfer, Engineering

ART 115. Art History Survey II. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. Students seeking to take this course to meet the college transfer humanities requirement may also take ART-111 or ART-115 (no ART prerequisites).

Pathways: Arts Transfer, Science Transfer, Engineering

AST 111. Descriptive Astronomy. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them.

Pathways: Arts Transfer

AST 111A. Descriptive Astronomy Lab. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-2.0. Work-0.0

The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them.

Pathways: Arts Transfer

AST 151A. General Astronomy I Lab. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-2.0. Work-0.0

The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system.

Pathways: Arts Transfer, Science Transfer

AST 151. General Astronomy I. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system.

Pathways: Arts Transfer, Science Transfer

BIO 110. Principles of Biology. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life.

Pathways: Arts Transfer, Science Transfer

BIO 111. General Biology I. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.

Pathways: Arts Transfer, Science Transfer

BIO 112. General Biology II. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels.

Prerequisites: Take BIO 111
Pathways: Science Transfer

COM 231. Public Speaking. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support.

Prerequisites: Complete one of the following options:
Take ENG 111 with a minimum grade of C
Take ENG 112 with a minimum grade of C
Take ENG 113 with a minimum grade of C
Take ENG 114 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer, Engineering

CHM 151. General Chemistry I. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152.

Prerequisites: Complete one of the following options:

- Take MAT 161 MAT 171 or MAT 175 with a minimum grade of C
- Take CHM 121

Pathways: Arts Transfer, Science Transfer, Engineering

CHM 152. General Chemistry II. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.

Prerequisites: Take CHM 151
Pathways: Science Transfer

DFT 170. Engineering Graphics. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices.

Prerequisites: Take EGR 120 or EGR 150
Pathways: Engineering

ECO 251. Principles of Microeconomics. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. Students seeking to take this course to meet the college transfer Social/Behavioral Sciences requirement may also take ECO-252 (no ECO prerequisites).

Prerequisites: Take MAT 121 MAT 122 MAT 171 MAT 172 MAT 263 MAT 271 MAT 272 MAT 273 or MAT 285 with a minimum grade of C
Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer, Engineering

ECO 252. Principles of Macroeconomics. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. Students seeking to take this course to meet the college transfer Social/Behavioral Sciences requirement may also take ECO-251 (no ECO prerequisites).

Prerequisites: Take MAT 121 MAT 122 MAT 171 MAT 172 MAT 263 MAT 271 MAT 272 MAT 273 or MAT 285 with a minimum grade of C
Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

EGR 150. Intro to Engineering. 2.0 Credits. Class-1.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

Pathways: Engineering

ENG 111. Writing and Inquiry. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved to satisfy the comprehensive articulation agreement general education core requirement in English composition.

Pathways: Arts Transfer, Science Transfer, Engineering

ENG 112. Writing and Research in the Disciplines. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines. This course has been approved to satisfy the comprehensive articulation agreement general education core requirement in.

Prerequisites: Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer, Engineering

ENG 231. American Literature I. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. Students seeking to take this course to meet the college transfer humanities requirement may also take ENG-232. (no ENG prerequisites) ENG-231 is a introduction to traditional and nontraditional writers, significant literary trends and movements, literary terminology, and a variety of critical approaches.

Prerequisites: Take ENG 112 ENG 113 or ENG 114 Minimum grade C
Pathways: Arts Transfer, Science Transfer, Engineering

ENG 232. American Literature II. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. Students seeking to take this course to meet the college transfer humanities requirement may also take ENG-231. (no ENG prerequisites) ENG-232 is an introduction traditional and nontraditional writers, significant literary trends and movements, literary terminology, and a variety of critical approaches.

Prerequisites: Take ENG 112 ENG 113 or ENG 114 Minimum grade C
Pathways: Arts Transfer, Science Transfer, Engineering

ENG 241. British Literature I. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

Prerequisites: Take ENG 112 ENG 113 or ENG 114 Minimum grade C
Pathways: Arts Transfer, Science Transfer, Engineering

ENG 242. British Literature II. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

Prerequisites: Take ENG 112 ENG 113 or ENG 114 Minimum grade C
Pathways: Arts Transfer, Science Transfer, Engineering

GEL 111. Geology. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth.

Pathways: Arts Transfer, Science Transfer

HIS 111. World Civilizations I. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. Students seeking to take this course to meet the college transfer Social/Behavioral Sciences requirement may also take HIS-112. (no HIS prerequisites).

Prerequisites: Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

HIS 112. World Civilizations II. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. Students seeking to take this course to meet the college transfer Social/Behavioral Sciences requirement may also take HIS-111 (no HIS prerequisites).

Prerequisites: Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

HIS 131. American History I. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. Students seeking to take this course to meet the college transfer Social/Behavioral Sciences requirement may also take HIS-132 (no HIS prerequisites).

Prerequisites: Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

HIS 132. American History II. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. Students seeking to take this course to meet the college transfer Social/Behavioral Sciences requirement may also take HIS-131 (no HIS prerequisites).

Prerequisites: Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

MAT 143. Quantitative Literacy. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

Pathways: Arts Transfer

MAT 152. Statistical Methods I. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.

Pathways: Arts Transfer

MAT 171. Precalculus Algebra. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology.

Prerequisites: Take MAT 121 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer, Engineering

MAT 172. Precalculus Trigonometry. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology.

Prerequisites: Take MAT 171 Minimum grade C
Pathways: Science Transfer, Engineering

MAT 263. Brief Calculus. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is designed to introduce concepts of differentiation and integration and their applications to solving problems. Topics include graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results.

Prerequisites: Take MAT 171 Minimum grade C
Pathways: Science Transfer

MAT 271. Calculus I. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology. This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions.

Prerequisites: Take MAT 172 or MAT 175 Minimum grade C
Pathways: Science Transfer, Engineering

MAT 272. Calculus II. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology.

Prerequisites: Take MAT 271 Minimum grade C
Pathways: Science Transfer, Engineering

MUS 110. Music Appreciation. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. Students seeking to take this course to meet the college transfer humanities requirement may also take MUS-110. (no MUS prerequisites).

Pathways: Arts Transfer, Science Transfer, Engineering

MUS 112. Introduction to Jazz. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. Students seeking to take this course to meet the college transfer humanities requirement may also take MUS-110. (no MUS prerequisites).

Pathways: Arts Transfer, Science Transfer, Engineering

PHI 215. Philosophical Issues. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue. Students seeking to take this course to meet the college transfer humanities requirement may also take PHI-240. (no PHI prerequisites).

Prerequisites: Take ENG 111 Minimum grade C
Pathways: Arts Transfer, Science Transfer, Engineering

PHI 240. Introduction to Ethics. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, and virtue ethics. Upon completion, students should be able to apply various ethical theories to moral issues such as abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies. Students seeking to take this course to meet the college transfer humanities requirement may also take PHI-215. (no PHI prerequisites).

Prerequisites: Take ENG 111 Minimum grade C
Pathways: Arts Transfer, Science Transfer, Engineering

PHY 110. Conceptual Physics. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied.

Pathways: Arts Transfer, Science Transfer

PHY 110A. Conceptual Physics Lab. 1.0 Credit. Class-0.0. Clinical-0.0. Lab-2.0. Work-0.0

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110.

Pathways: Arts Transfer, Science Transfer

PHY 151. College Physics I. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the comprehensive articulation agreement general education core requirement in natural sciences/Mathematics.

Prerequisites: Take MAT 171
Pathways: Science Transfer

PHY 152. College Physics II. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-2.0. Work-0.0

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

Prerequisites: Take PHY 151
Pathways: Science Transfer

PHY 251. General Physics I. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

Prerequisites: Take MAT 271
Pathways: Science Transfer, Engineering

PHY 252. General Physics II. 4.0 Credits. Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

Prerequisites: Take All: MAT 272 and PHY 251
Pathways: Science Transfer, Engineering

POL 120. American Government. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course is a study of the origins, development, structure, and functions of American government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course is intended for all associate degree programs.

Prerequisites: Take ENG 111 with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

PSY 150. General Psychology. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.

Prerequisites: Take ENG 111with a minimum grade of C
Pathways: Arts Transfer, Science Transfer

SOC 210. Introduction to Sociology. 3.0 Credits. Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

Prerequisites: Take ENG 111with a minimum grade of C
Pathways: Arts Transfer, Science Transfer