General Education Component

Area I. Written Composition

EN 121. (3) First-Year Composition Honors I.

Accelerated training in expository writing and reading taken in lieu of English 111 by superior freshman students selected on the basis of placement tests

EN 122. (3) First-Year Composition Honors II.

A continuation of the accelerated training begun in English 121, stressing the development of advanced skills in several modes of composition as well as the acquisition and development of skills in academic research

Area II. Humanities and Fine Arts

COM 211. (3) Business and Professional Speaking.

Communication and critical thinking skills as applied to presentations, interviews and organizational interactions in business contexts. Emphasis on needs analysis and strategies for effective research, organization, audience adaptation, delivery and use of visual elements to formulate presentations

EN 212. (3) Survey of English Literature.

A continuation of English 211 from the Pre-Romantics to the present. Recommended in sequence.

EN 221. (3) American Literature through Whitman.

Major American poets and prose writers of the period.

EN 222. (3) American Literature from Whitman to the Present.

Major American poets and prose writers of the period. Recommended in sequence.

EN 231. (3) Literature of the World I.

A survey of selections from the great literature of the world, covering major writers of the Ancient World to 1650.

EN 232. (3) Literature of the World II.

A study of the great works of world literature, covering major writers from 1650 to the modern era.

EN 233. (3) Honors Literature of the World I.

An intensive survey of the literature of the world from antiquity to 1650. In-depth reading in the works of selected authors will be required and written reports and/or research projects will be expected of each student

EN 234. (3) Honors Literature of the World II.

An intensive study of the literature of the world from 1650 to the modern age. In-depth reading of the works of selected authors will be required and written reports and/or research projects will be expected of each student

AR 281. (3) Art History Survey I.

A study of major monuments in western art from the Paleolithic through the medieval periods.

AR 282. (3) Art History Survey II.

An illustrated lecture course that introduces students to art in the Western tradition from the Middle Ages to the modern period, roughly 1300-1800. Students will learn the chronology and development of art in this critical period. Discussions in class, written assignments, and examinations will test students' knowledge, as well as their ability to apply concepts and terms.

FR 101. (3) Introductory French.

Emphasizes listening, speaking, reading and writing skills. Basic concepts of grammar are introduced. Course is enhanced with audio, video, software and Internet components. No prior knowledge of the language is required.

FR 102. (3) Introductory French.

A continuation of French 101.

FR 111. (1) Language Laboratory.

Required of all students enrolled in Introductory French 101.

FR 112. (1) Language Laboratory.

Required of all students enrolled in Introductory French 102.

FR 201. (3) Intermediate French.

Review and expansion of grammar and vocabulary. Speaking, listening, reading, and writing skills further developed.

FR 202. (3) Intermediate French.

A continuation of French 201

GR 101. (3) Introductory German.

Emphasizes listening, speaking, reading and writing skills. Basic concepts of grammar are introduced. Course is enhanced with audio, video, software and Internet components. No prior knowledge of the language is required

GR 102. (3) Introductory German.

A continuation of German 101

GR 111. (1) Language Laboratory.

Required of all students enrolled in Introductory German 101

GR 112. (1) Language Laboratory.

Required of all students enrolled in Introductory German 102.

GR 201. (3) Intermediate German.

Review of grammar and pronunciation; introduction to German literature and scientific German.

GR 202. (3) Intermediate German.

A continuation of German 201.

MU 222. (3) Music Appreciation.

The materials of music terminologies, styles, literature, and forms covered chronologically from Baroque to twentieth century. Lecture and listening designed to enhance a better understanding and enjoyment of music

PHL 201. (3) Introduction to Philosophy.

An examination of humanity's quest for wisdom. Emphasis is placed on the ideas, methodologies, and problems of classic and contemporary philosophy. Topics of study may include the nature of human agency and freedom, how meaning and value are derived and justified, threats to a meaningful life, and how these threats might be ameliorated.

RE 221. (3) Old Testament Introduction.

Study of the writings of the Old Testament with special attention to the methods, principles, and tools for such study and to the historical, literary, and theological aspects and significance of these writings.

RE 231. (3) New Testament Introduction.

Study of the writings of the New Testament with special attention to the methods, principles, and tools for such study and to the historical, literary, and theological aspects and significance to these writings.

SP 101. (3) Introductory Spanish.

Emphasizes listening, speaking, reading and writing skills. Basic concepts of grammar are introduced. Course is enhanced with audio, video, software and Internet components. No prior knowledge of the language is required.

SP 102. (3) Introductory Spanish.

A continuation of Spanish 101

SP 111. (1) Language Laboratory.

Required of all students enrolled in Introductory Spanish 101

SP 112. (1) Language Laboratory.

Required of all students enrolled in Introductory Spanish 102.

SP 201. (3) Intermediate Spanish.

Grammar review, pronunciation, conversation, diction, composition, and introduction to Spanish literature.

SP 202. (3) Intermediate Spanish.

A continuation of Spanish 201.

Area III. Natural Sciences and Mathematics

MA 112. (3) Pre-calculus Algebra.

This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer's rule, and mathematical induction

MA 113. (3) Pre-calculus Trigonometry.

This course is a continuation of Pre-Calculus Algebra. It includes the study of trigonometric and inverse trigonometric functions and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre's Theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems.

MA 115. (4) Pre-calculus Algebra and Trigonometry.

This course is a one semester combination of Pre-calculus Algebra and Pre-calculus Trigonometry intended for superior students. The course covers the following topics: algebra of functions (including polynomial, rational, exponential, and logarithmic functions); systems of equations and inequalities; quadratic inequalities; the binomial theorem; the study of trigonometric and inverse trigonometric functions including extensive work with trigonometric identities and trigonometric equations; vectors; complex numbers; DeMoivre's Theorem; polar coordinates.

MA 125. (4) Calculus I.

This is the first of three courses in the basic calculus sequence. Topics include limits, derivatives, applications of the derivative, definite and indefinite integrals, exponential and logarithmic of Instruction Courses of Instruction 323 functions, and inverse functions

MA 126. (4) Calculus II.

This is the second of three courses in the basic calculus sequence. Topics include techniques of integration, applications of the integral, sequences, series, conic sections, parametric equations, and polar coordinates.

MA 227. (4) Calculus III.

This is the third of three courses in the basic calculus sequence. Topics include vectors, vector-valued functions, and functions of several variables, partial derivatives, multiple integrals, vector fields, line integrals and surface integrals

MA 237. (3) Linear Algebra.

This course introduces the basic theory of linear equations and matrices, real vector spaces, bases and dimensions, linear transformations and matrices, determinants, eigenvalues and eigenvectors, inner product spaces, and the diagonalization of symmetric matrices. Additional topics may include quadratic forms and the use of matrix methods to solve systems of linear differential equations.

MA 238. (3) Applied Differential Equations I.

An introduction to numerical methods, qualitative behavior of first-order differential equations, techniques for solving separable and linear equations analytically, and applications to various models (e.g., population, motion, chemical mixtures, etc.); techniques for solving higher-order linear differential equations with constant coefficients (general theory, undetermined coefficients, reduction of order, and the method of variation of parameters), with emphasis on interpreting the behavior of the solutions, and applications to physical models whose governing equations are of higher order; the Laplace transform as a tool for the solution of initial-value problems whose inhomogeneous terms are discontinuous

BI 102. (4) Introductory Biology.

Biology of plants and animals, including humans, via a comparative study of body systems. This course may not be used to satisfy the requirements for a major or minor in biology

BI 111. (4) Principles of Biology.

The chemical basis of life, cell structure and function, metabolism, and genetics. Designed for biology and other science majors or minors.

BI 112. (4) Principles of Biology.

Evolution, diversity, and ecology of organisms. Designed for biology and other science majors or minors.

CH 101L. (1) Introductory Chemistry Laboratory.

Laboratory for Chemistry 101 consisting of basic laboratory operations and techniques used in measuring physical and chemical properties.

CH 102. (3) Introduction to Organic and Biochemistry.

Continuation of Chemistry 101. Includes an introduction to organic chemistry and biochemistry. Acceptable for credit toward general studies or a major in nursing. Not applicable for credit toward a chemistry major or minor

CH 102L. (1) Introduction to Organic and Biochemistry Laboratory.

Laboratory for Chemistry 102 provides further experience for developing laboratory skills and illustrating concepts presented in CH 102 lecture.

CH 111. (3) General Chemistry.

The fundamental principles and laws governing inorganic substances. Introductory materials, subatomic and atomic theory and structure, chemical bonding, molecular structure, chemical equations and calculations, thermochemistry, kinetic theory of matter and gas laws, and the periodic table.

CH 111L. (1) General Chemistry Laboratory.

Laboratory for Chemistry 111 consisting of the determination of densities, chemical formulas, combining ratios, molar masses, molecular structure, group reactivates, ion identities, and specific heats and heats of solution.

CH 112. (3) General Chemistry.

Continuation of Chemistry 111. A study of chemical reactions in solution including solutions, spontaneity of reactions, free energy change, entropy change, equilibrium systems, rates of reaction, precipitation reactions, acids and

bases, oxidation and reduction, and coordination compounds. The laboratory work consists of classical qualitative and quantitative procedures.

CH 112L. (1) General Chemistry Laboratory.

Laboratory for Chemistry 112 consisting of the qualitative and quantitative analysis of selected chemicals; the determination of rates of reaction and equilibrium constants; and the measurement of pH and acid-base titrations.

GE 111. (4) Principles of Physical Geography I.

Study of the physical features of the earth's environment pertaining to weather, climate, biomes, and major water bodies with an emphasis on the interrelated processes that shape these features and the resulting distributions and global patterns that occur.

GE 112. (4) Principles of Physical Geography II.

Study of the physical features of the earth's environment pertaining to landforms, physiographic regions, and soils with an emphasis on the interrelated processes that shape these features and the resulting distributions and global patterns that occur.

PH 121. (4) Introductory Physics.

An introduction to the physical principles of motion, waves, sound, electricity, magnetism, and light. Computers and electronic sensors are used in some of the activities, but no previous experience with computers is necessary.

PH 125. (4) Descriptive Astronomy.

The extraterrestrial environment including the solar system, stars, and galaxies. Cosmology and the development of astronomy is also considered along with topics of current interest. Instruction in the use of astronomical instrumentation is carried out in the observatory and planetarium.

PH 241. (4) General Physics I.

A basic physics course covering mechanics, heat, and sound. Designed for students in pre-medical, pre-dental, pre-pharmacy, and other programs not requiring calculus-based physics.

PH 242. (4) General Physics II.

A continuation of Physics 241, covering electricity, magnetism, optics, and topics in modern physics.

PH 251. (5) Technical Physics I.

A calculus-based physics course covering mechanics, heat, and sound. Required in pre-engineering, physics, general and professional chemistry, and industrial hygiene programs.

PH 252. (5) Technical Physics II.

A continuation of Physics 251, covering electricity, magnetism, optics, and topics in modern physics.

Area IV. History, Social and Behavioral Sciences

HI 201. (3) United States History to 1877.

A survey of United States history to 1877

HI 202. (3) United States History since 1877.

A survey of United States history from 1877 to present.