Dual Enrollment Course Listing

Business

BA 123 Business Concepts (3)

- A survey course designed to introduce the student to business issues and practices in the United States. All major functions of business are included (management, marketing, law, finance, economics, operations, accounting, information technology) as well as issues facing the business person (ethics, globalization, motivation, etc.) Suitable for students considering a career in business as well as for non-business majors who will interact with the business enterprises (e.g., educators, engineers).

Biology

BIO 1003 Plants and People (No Lab) (3)

- An introduction to the basic principles of plant biology and the interrelationship between plants and humans with an emphasis on basic plant anatomy and physiology, economic and historical importance, and the roles of plants in the biosphere. **Open to non-science majors only**

BIO 114 Principles of Biology I (w/ Lab) (4)

- Five basic topics are discussed in some detail: biological chemistry, cell biology, metabolism, genetics, and animal organization and homeostasis. Laboratory exercises designed to introduce the student to scientific investigation and the structure and function of biological systems are an essential part of the course. **Corequisite: Lab Required.**

BIO 124 Principles of Biology II (w/ Lab) (4)

- A continuation of Biology 114, including evolutionary principles, examination of diversity of living things, diversity, structure and function of plants, animal behavior, populations, communities, ecosystems, the biosphere, and the conservation of each. **Prerequisite: "C" or better in BIO 114. Corequisite: Lab Required**

BIO 154 Human Body Systems

- Human Body Systems will explore the structure and function of the human body. The class and laboratory will cover the different systems that make up the body and how they work to maintain homeostasis. The laboratory will cover the different systems and include model identification and dissection which will facilitate student learning. **Prerequisite: BIO 114 or BIO 163 or ES 141. Corequisite: Lab Required**

BIO 163 Medical Terminology

- This course introduces building and utilizing a medical vocabulary through the use of prefixes, suffixes, word roots, and combining forms/vowels. Emphasis is placed on correct spelling, pronunciation, and knowing the correct definitions of many medical terms

Chemistry

CH 104 General Chemistry I (w/ lab) (4)

- Fundamentals of chemistry with emphasis on atomic structure, stoichiometry, thermochemistry, properties of solution, properties of matter. The laboratory is quantitative in nature. **Prerequisite: MA 113 Prerequisite: MA 113. Corequisite: Lab Required.**

CH 114 General Chemistry II (w/ lab) (4)

- A continuation of CH 104. Emphasis is on chemical equilibria, thermodynamics, kinetics, acid-base reactions, electrochemistry, and properties of solutions. Includes laboratory time. **Prerequisite: A 'C' or better in CH 104 Prerequisite: A 'C' or better in CH 104. Corequisite: Lab Required**.

Communication

COM 163 Interpersonal Communication (3)

- Students in this course will apply communication concepts and principles to interpersonal communication. Students will use communication exercises, role playing, and case studies throughout this course. Students will analyze communication dynamics Courses and improve communication skills through language, nonverbal communication, listening, perception of self and others, relationship development, and assertiveness.

Criminal Justice

CRJ 103 - Introduction to Criminal Justice (3)

- This course is an introduction to the criminal justice system that covers the processes, institutions and administration of justice in the United States. The course will concentrate on the purposes and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections.

Computer Science

CSIT 103 - Introduction to Information Systems (3)

- An introduction to the concepts of Information Systems including history, terminology, principles, and use of computers in solutions in business, scientific and educational decision-making problems. The emphasis of the course is topics in human computer interaction and human factors, collaborative technologies, ethics, privacy, and ownership of information and information sources, information representation, the information life cycles, and the transformation of data to information. The relationships to the other main areas of computing such as Information Technology, Computer Engineering, Software Engineering, and Computer Science are explored. Hands on assignments in Word Processing, Spreadsheet Analysis, Database, Presentation Graphics, and collaboration software.

CSIT 123 - Computing Infrastructure Basics (3)

- Students will gain a complete, step-by-step approach for learning the fundamentals of supporting a computing infrastructure. This course maps fully of CompTIA's latest A+ 220-1001 (Core 1) Exam objectives. Specific topic coverage areas include: taking a computer apart and putting back together, learning all about motherboards, supporting processors and upgrading memory, supporting the power system and troubleshooting computers, supporting hard drives and other storage devices, supporting I/O devices, setting up a local network, network infrastructure and troubleshooting, supporting mobile devices and virtualization, cloud computing, and printers. An introductory look at programming with Python and Elecrow's CrowPi hardware and software environment will also be explored.

Economics

ECO 213 - Microeconomics (3)

- Introduction to the theory of demand and supply and price determination in market economies. The study of individual consumers and producers, different market structures and the distribution of income. **Prerequisite: MA 113**

ECO 223 - Macroeconomics (3)

- Introduction to the theory of national income determination for the United States and other global economic systems. The study of fiscal and monetary policy tools and the government's role in promoting stability and growth, and the causes of unemployment, inflation, and trade deficits. **Prerequisite: MA 113**

English Language Arts

ENG 143 - College Composition (3)

- Intensive training in methods of exposition and research leading to the ability to write coherent, clear, and persuasive essays. This course focuses on the process of writing, which includes revision and editing of the equivalent of at least 20 pages of prose (approximately 5,000 words).

ENG 153 - Introduction to Literature (3)

- Introduces the student to literature of some complexity and sophistication, developing a critical vocabulary and skills in reading on an advanced level. Analysis of at least three genres and taking into consideration the cultural and historical contexts of these works.

Engineering and Technical Design

ETD 103 - Basic Technical Drawing (3)

- A course in the fundamentals of drafting. Use of instruments and materials, lettering and techniques of penciling. Primary emphasis is on shape and size description of three-dimensional objects. Preparation of drawings for various reproduction processes. Application of drawing geometry and study of sections and conventional practices.

ETD 273 - Electrical Fundamentals (3)

- Electrical circuit principles. Basic circuit laws, motors, generators, controls, distribution systems, and electrical codes are presented. Theory of electricity and magnetism, electrical phenomena, and measurements. Circuits, power, AC phenomena, capacitance, and conduction are studied. **Prerequisite: PH 154**

Exercise Science

EXS 102 - Lifetime Wellness (2)

- Positive wellness based on the value of physical activity and healthy choices is explored. The lab consists of clinical experience with personal wellness status. Personalized exercise prescriptions will be provided.

EXS 203 - Risk and Sports (3)

- This course examines terminology, legal aspects and risks associated with sports performance and physical activity.

History

HIS 103 - American History I (3)

- Traces the major trends in the history of the United States from colonial times to the end of Reconstruction. Concentrates upon the diplomatic, political, economic, intellectual, and cultural achievements of the American nation, set within the larger framework of the European world.

HIS 113 - American History II (3)

- Increasing emphasis on the post-Civil War industrial development of the United States and its subsequent role as a great world power to present.

HIS 203 World History I (3)

- A historical review of human civilization from prehistoric times through the Renaissance. The class focuses upon the political, economic, and cultural achievements of various civilizations of the world.

HIS 213 World History II (3)

- A survey of major civilizations of the world in the post-Renaissance period, including Asian, African, and Western European civilizations in the areas of politics, economics, and scientific, and cultural developments. Emphasis is placed on the increasing interdependence of world civilizations and people.

Mathematics

MA 113 College Algebra (3)

- Topics include: solving equations, complex numbers, interval notation, graphing functions, transformations of functions, combining functions, composite functions, inverse functions, and systems of equations in two variables.

MA 123 Trigonometry (3)

- Topics include: Trigonometric functions, identities, inverses, unit circle, solutions of triangles, trigonometric equations, complex numbers, radian measure, angular velocity. **Prerequisite: Adequate SAT/ACT Mathematics score or approval from mathematics Department Chair**

MA 124 Precalculus (4)

- Topics include: review of algebraic expressions, linear systems, partial fractions, synthetic division, matrices, slope, fractional exponents, exponential and logarithmic relations, Trigonometric functions, identities, inverses, vectors, polar coordinates, conic sections, summation notation, and elementary series. **Prerequisite: Three years of high school mathematics and adequate SAT/ACT Mathematics score or approval from mathematics Department Chair**

MA 134 Calculus I (4)

- Topics include: limits, continuity, differentiation, applications, definition of the integral, and fundamental theorem of integral calculus. **Prerequisite: Three years of high school mathematics, including trigonometry, and adequate SAT/ACT Mathematics score or approval from Mathematics Department Chair**

MA 164 Calculus II (4)

- Topics include: integration evaluation techniques, improper integrals, applications of integration, infinite sequences and series, parametric equations, polar coordinates. **Prerequisite: "C" or better in MA 134 or equivalent**

MA 253 Statistics (3)

- Topics include: laws of probability, frequency distributions, sampling, expectation and variance, normal and sampling distributions, hypothesis testing, least squares, point, and interval estimates of parameters. Not open to engineering/ science majors. **Prerequisites: MA 113 Prerequisite: MA 113**

Physics

PH 154 College Physics I (4)

- An algebra-based introduction to the concepts and application of Newton's Law, linear and rotational motion, work, energy, and momentum, solids and fluids, and heat. Experimental investigation of selected topics. Prerequisites: MA 113, MA 123 Prerequisite: **MA 113 and MA 123. Corequisite: Lab Required**

PH 164 College Physics II (4)

- An algebra-based introduction to the concepts and application of vibrations, waves and sound, Coulomb's Law, capacitance, DC electric circuits, magnetism, electromagnetic induction, optics and optical instruments. Experimental investigation of selected topics. **Prerequisite: PH 154**

Political Science

POLS 113 Intro to Government (3)

- An examination of the origins and operations of the national political machinery; the development, functions and philosophy of political parties; the problems and tasks of leading governmental agencies.

Psychology & Sociology

PSY 113 Principles of Psychology (3)

- Introduction to the scientific study of human and animal behavior. Course covers all of the major areas within psychology, including development, learning,

intelligence, personality, attitudes, altered states of consciousness, abnormal behavior, and psychotherapy.

SOC 103 Principles of Sociology (3)

- A presentation of the basic concepts and principles of sociology, designed to develop a system of thought about the nature of society and major special issues, such as ethnic patterns, social stratification, youth, educational, and religious institutions.

Spanish

SPN 113 Spanish Reading & Writing I (3)

- An introduction to the Spanish language that includes vocabulary development and the basics of grammar structure with an emphasis on reading and writing, as well as developing cultural insight into Hispanic countries. No previous study of Spanish is required.

SPN 123 Spanish II (3)

- A continuation of the first semester of language (SPN 113), the focus of this second semester of beginning Spanish is to continue the development of listening, speaking, reading, and writing skills. Latin American and Spanish cultures are covered to provide a cultural insight in the target language. **Prerequisite: SPN 113 or by placement**

SPN 203 Spanish III (3)

- An intermediate Spanish class with an emphasis on reading and writing skills which includes vocabulary and grammar instruction. Students explore Hispanic cultures with readings and videos based on historical, as well as current events to develop an understanding of the Hispanic world. Students analyze authentic literary selections with an expanded working vocabulary and write Spanish compositions with improved creative expression. Communicative skills are also emphasized through personal reflections and discussions with peers. **Prerequisite: SPN 123 or by placement**

SPN 213 Spanish IV (3)

- A continuation of Spanish III, with an emphasis on reading comprehension of more complex texts, such as prose, fiction and articles. In addition, students will improve writing fluency and accuracy in essays in Spanish. The difficulty level of the reading selections increases in this course. **Prerequisite: SPN 203**

Speech

SP 203 Effective Speaking (3)

- Throughout this course, students will learn communication principles to improve public speaking and listening skills. Through application, students will develop confidence in the delivery of oral presentations. Additionally, students will learn how to organize, outline, research, and conduct audience analysis to prepare for effective speaking.