### **COURSE DESCRIPTIONS**

#### ACADEMIC COURSE DESCRIPTIONS

#### **ACCOUNTING**

**ACC 2213 PRINCIPLES OF ACCOUNTING I** - A study of the financial accounting principles that relate to business. The topics to be covered include the accounting cycle, accounting systems for service and merchandising businesses, assets, liabilities, and equity. Three hours, 3 credits.

**ACC 2223 PRINCIPLES OF ACCOUNTING II** - A continuation of ACC 2213. The topics to be covered include corporate accounting concepts, managerial accounting concepts and internal business decision making. Prerequisite: Accounting 2213. Three hours, 3 credits.

#### **ART**

**ART 1113 ART APPRECIATION** - A course designed to provide an understanding and appreciation of the visual arts. Three hours, 3 credits.

**ART 1313 DRAWING I** – Includes the study of the basic elements and principles of organization in two dimensions and the selection, manipulation and synthesis of these components to create an organized visual expression. Students will apply overlapping foreshortening and diminished scale. Black and white media will be stressed. Three hours, 3 credits.

**ART 1323 DRAWING II** – Continuation of skills from Drawing I with an introduction to color and further study of composition. Three hours, 3 credits.

**ART 1433 DESIGN I** - Introduction to the fundamentals of two-dimensional design with emphasis in black and white media. Six hours, 3 credits. Offered fall semester only.

**ART 1443 DESIGN II** - Continuation of Design I with emphasis in color theory. Six hours, 3 credits. Offered spring semester only.

**ART 1453 THREE DIMENSIONAL DESIGN** - To provide students with an understanding of spatial form in three dimensions through the use of applied design elements and principles to studio problems in mixed media. Six hours, 3 credits.

**ART 1513 COMPUTER ART** - An introduction to the theory and practice of using the computer to create art. A study of methods and applications utilizing the computer and selected software applications. Three hours, 3 credits.

**ART 1913 ART FOR ELEMENTARY TEACHERS** – Development of essential concepts of children's art education in compliance with the National Standards for Arts Education. Three hours, 3 credits.

**ART 2513 PAINTING I-** An introduction to painting compositions and techniques. Six hours, 3 credits.

**ART 2523 PAINTING II-** A further study in the compositions, techniques, and concepts in Painting I. Six hours, 3 credits.

#### **BUSINESS ADMINISTRATION**

**BAD 1121 BUSINESS SEMINAR I** - This course is designed to coordinate the various business-related student activities to the local level. It promotes leadership and professionalism in civic and social functions which includes student participation and guest speakers.

**BAD 1113 INTRODUCTION TO BUSINESS** - This course is designed to introduce students to the basic concepts of business. Students receive instruction regarding the current business and economic environment, entrepreneurship, marketing, management, financial management, and business careers. Three hours, 3 credits.

**BAD 1121 BUSINESS SEMINAR I** - This course is designed to coordinate the various business-related student activities to the local level. It promotes leadership and professionalism in civic and social functions which includes student participation and guest speakers. (Course description change effective Fall 2015)

**BAD 2323 BUSINESS STATISTICS** – Introduction to statistical methods of collecting, presenting, analyzing, and interpreting quantitative data for business management and control. Topics include: central tendency and dispersion; probability; binomial, Poisson, and normal distributions; estimation and hypothesis testing. Prerequisite: MAT 1233. Three hours, 3 credits.

**BAD 2413 LEGAL ENVIRONMENT OF BUSINESS** – An introduction to interrelationships of law and society, jurisprudence and business. Topics include an introduction to law, law of contracts, agency, and employment. Three hours, 3 credits.

#### **BIOLOGY**

**BIO 1111 PRINCIPLES OF BIOLOGY LAB I-** A laboratory course for non-science majors that contains experiments and exercises that reinforce the principles introduced in BIO 1113 Principles of Biology I, Lecture.

**BIO 1113 PRINCIPLES OF BIOLOGY LECTURE I-** A lecture course for non-science majors that provides an introduction to the basic principles of modern biology and their relevance to modern life. Emphasis is placed on the nature and history of scientific thought, basic biological chemistry, cell structure and processes, genetics

**BIO 1121 PRINCIPLES OF BIOLOGY LAB I-** A laboratory course for non-science majors that contains experiments and exercises that reinforce the principles introduced in BIO 1123 Principles of Biology II, Lecture.

**BIO 1123 PRINCIPLES OF BIOLOGY LECTURE II-** A lecture course for non-science majors that emphasizes the survey of the diversity of life, ecology, evolution, and an overview of organ systems.

**BIO 1131 GENERAL BIOLOGY I, Laboratory** – A laboratory course for science majors that contains experiments and exercises that reinforce the principles introduced in BIO 1133 General Biology I, lecture. Co-requisite: BIO 1133. Two hours, 1 credit.

**BIO 1133 GENERAL BIOLOGY I, Lecture** – A lecture course for science majors that includes study of the scientific method, chemistry relevant to biological systems, cell structure and physiology, cell processes including photosynthesis and cellular respiration, cell division, genetics, and molecular genetics. Co-requisite: BIO 1131. Three hours, 3 credits.

- **BIO 1141 GENERAL BIOLOGY II, Laboratory** A laboratory course for science majors that contains experiments and exercises that reinforce the principles introduced in BIO 1143 General Biology II, Lecture. Pre-requisite: BIO 1131. Co-requisite: BIO 1143. Two hours, 1 credit.
- **BIO 1143 GENERAL BIOLOGY II, Lecture** A lecture course for the science majors that reinforces concepts introduced in BIO 1133 General Biology I, Lecture, while emphasizing the diversity of life. Topics covered include evolution, classification, ecology, detailed consideration of each group of organisms and viruses, study of animals and plants including their basic anatomy and physiology. Pre-requisite: BIO 1133. Co-requisite: BIO 1141. Three hours, 3 credits.
- **BIO 1311 BOTANY I, Laboratory -** A laboratory course that contains experiments and exercises that reinforce the principles introduced in BIO 1313 Botany I, Lecture.
- **BIO 1313 BOTANY I, Lecture -** A lecture course covering the representative groups of the plant kingdom, their anatomy, physiology, taxonomy, and economic importance.
- **BIO 1321 BOTANY II, Laboratory –** A laboratory course that contains experiments and exercises that reinforce the principles introduced in BIO 1323 Botany II, Lecture.
- **BIO 1323 BOTANY II, Lecture** A lecture course that emphasizes classification and identification of plants.
- **BIO 1613 NUTRITION** A lecture course covering the nutrients required for normal growth and prevention of major chronic diseases, and applied to the selection of food for ingestion, the metabolic process of digestion, assimilation, and absorption, and their applications for healthcare providers. Three hours, 3 credits.
- **BIO 2511 ANATOMY AND PHYSIOLOGY I, Laboratory** A laboratory course that contains experiments and exercises that reinforce the principles introduced in BIO 2513 Anatomy and Physiology I, Lecture. Co-requisite: BIO 2513. Two hours, 1 credit.
- **BIO 2513 ANATOMY AND PHYSIOLOGY I, Lecture** A lecture course that covers the anatomical and physiological study of the human body as an integrated whole. The course includes detailed studies of biological principles; tissues; and the integumentary, skeletal, muscular and nervous systems. Co-requisite: BIO 2511. Three hours, 3 credits.
- **BIO 2521 ANATOMY AND PHYSIOLOGY II, Laboratory** A laboratory course that contains experiments and exercises that reinforce the principles introduced in BIO 2523 Anatomy and Physiology II, Lecture. Pre-requisite: BIO 2511. Co-requisite: BIO 2523. Two hours, 1 credit.
- BIO 2523 ANATOMY AND PHYSIOLOGY II, Lecture A lecture course that includes detailed studies of the anatomy and physiology of the human endocrine, cardiovascular, lymphatic, respiratory, digestive, and urinary systems, as well as reproduction and development. Pre-requisite: BIO 2513. Corequisite: BIO 2521. Three hours, 3 credits.
- **BIO 2921 MICROBIOLOGY, Laboratory** A laboratory course which provides experiments that reinforce principles introduced in the lecture to include fundamental laboratory techniques in lab safety, microscopy, culturing and identification of microbes, and effectiveness of antimicrobial agents. Co-requisite: BIO 2923. Two hours, 1 credit.

**BIO 2923 MICROBIOLOGY, Lecture** – A lecture course providing a comprehensive study of microorganisms to include microbial taxonomy, metabolism, physiology and genetics, concepts of pathogenesis and immunity and other selected applied areas. Co-requisite: BIO 2921. Three hours, 3 credits.

#### **CHEMISTRY**

CHE 1211 GENERAL CHEMISTRY I, Laboratory – A laboratory course that contains experiments and exercises that reinforce the principles introduced in CHE 1213 General Chemistry I, Lecture. Pre-requisite: MAT 1313 or CHE 1321. Co-requisite: CHE 1213. Two hours, 1 credit.

CHE 1213 GENERAL CHEMISTRY I, Lecture – A lecture course that covers the fundamental principles of chemistry and their application. Chemical nomenclature, chemical reactions, stoichiometry, atomic structure, bonding theories, energy, periodic properties, and gas laws are among the topics discussed in depth. Pre-requisite: MAT 1313 or CHE 1323. Co-requisite: CHE 1211. Three hours, 3 credits.

CHE 1221 GENERAL CHEMISTRY II, Laboratory – A laboratory course that contains experiments and exercises that reinforce the principles introduced in CHE 1223 General Chemistry II, Lecture. Pre-requisite: CHE 1211. Co-requisite: CHE 1223. Two hours, 1 credit.

CHE 1223 GENERAL CHEMISTRY II, Lecture – A lecture course that covers solutions, kinetics, equilibria, thermodynamics, acid-base chemistry, and electrochemistry. Pre-requisite: CHE 1213. Co-requisite: CHE 1221. Three hours, 3 credits.

CHE 1311 PRINCIPLES OF CHEMISTRY I, Laboratory – A laboratory course that contains experiments and exercises that reinforce the principles introduced in CHE 1313 Principles of Chemistry I, Lecture. Co-requisite: CHE 1313. Two hours, 1 credit.

CHE 1313 PRINCIPLES OF CHEMISTRY I, Lecture – A lecture course that emphasizes basic terminology, measurement, atomic structure, periodic table, chemical bonding, stoichiometry, energy and states of matter. Co-requisite: CHE 1311. Three hours, 3 credits.

CHE 1321 PRINCIPLES OF CHEMISTRY II, Laboratory – A laboratory course that contains experiments and exercises that reinforce the principles introduced in CHE 1323 Principles of Chemistry II, Lecture. Pre-requisite: CHE 1311. Co-requisite: CHE 1323. Two hours, 1 credit.

CHE 1323 PRINCIPLES OF CHEMISTRY II, Lecture – A lecture course that emphasizes chemical stoichiometry, gases, solutions, acids/bases, and an introduction to organic chemistry. Prerequisite: CHE 1313. Co-requisite: CHE 1321. Three hours, 3 credits.

CHE 2421 ORGANIC CHEMISTRY I, Laboratory - A laboratory course that acquaints students with important manipulations and procedures, and the preparation and study of organic compounds being introduced in CHE 2423 Organic Chemistry I, Lecture. Co-requisite: CHE 2423. Two hours, 1 credit.

CHE 2423 ORGANIC CHEMISTRY I, Lecture – A lecture course that covers carbon chemistry, bonding structure and behavior, aliphatic compounds, stereochemistry, reaction mechanisms spectroscopy. Co-requisite: CHE 2421. Three hours, 3 credits.

**CHE 2431 ORGANIC CHEMISTRY II, Laboratory** - A laboratory course that acquaints students with important manipulations and procedures, as well as the preparation and study of aromatic and complex organic compounds being introduced in CHE 2433 Organic Chemistry II, Lecture. Prerequisite: CHE 2421. Co-requisite: CHE 2433. Two hours, 1 credit.

CHE 2433 ORGANIC CHEMISTRY II, Lecture – A lecture course that covers spectroscopy, aromatic compounds, carbonyl compounds and other complex compounds with emphasis on reactions and their mechanisms. Pre-requisite: CHE 2423. Co-requisite: CHE 2431. Three hours, 3 credits.

#### **COMPUTER SCIENCE**

**CSC 1113 COMPUTER CONCEPTS** - A computer competency course which introduces concepts, terminology, operating systems, electronic communications, and applications. Concepts are demonstrated and supplemented by hands-on computer use. Three hours lecture/lab, 3 credits.

**CSC 1123 COMPUTER APPLICATIONS I** - This course is designed to teach computer applications to include: word processing, electronic spreadsheet, database management, presentation design, and electronic communications with integration of these applications Three hours lecture/lab, 3 credits.

**CSC 1133 COMPUTER APPLICATIONS II** - This course is a continuation of CSC 1123 with concentration on advanced computer applications to include: Web design, OLE, Macros, and emerging technology. Pre-requisites: CSC 1113 or CSC 1123. Three hours lecture/lab, 3 credits.

**CSC 1613 COMPUTER PROGRAMMING I** - Introduction to problem-solving methods and algorithm development which emphasizes the imperative first approach; designing, debugging, looping, scope rules, functions, and a variety of applications in an object-oriented programming language. Three hours lecture/lab, 3 credits.

#### **CRIMINAL JUSTICE**

**CRJ 1313 INTRODUCTION TO CRIMINAL JUSTICE** - History, development, and philosophy of law enforcement in a democratic society, introduction to agencies involved in the administration of criminal justice; career orientation. Three hours, 3 credits.

**CRJ 1323 POLICE ADMINISTRATION AND ORGANIZATION** –Principles of organization and administration in law enforcement as applied to law enforcement agencies; introduction to concepts of organizational behavior. Three hours, 3 credits.

**CRJ 1363 INTRODUCTION TO CORRECTIONS** - An overview of the correctional field; its origins, historical and philosophical background, development, current status, and relationship with other facets of the criminal justice system. Three hours, 3 credits.

**CRJ 2513 JUVENILE JUSTICE**- Organization, functions, and jurisdiction of juvenile agencies. Processing, detention, and disposition of cases. Statutes and court procedures applied to juveniles. Three hours, 3 credits.

#### **ECONOMICS**

ECO 2113 PRINCIPLES OF MACROECONOMICS – The study of a nation's economy to

include the following topics: supply and demand, production possibilities, monetary and fiscal policies, factors of production, GDP/business cycles and economic growth, circular flow of market economies and international trade. Three hours, 3 credits.

**ECO 2123 PRINCIPLES OF MICROECONOMICS** – The study of firms, industries, and consumers to include the following topics: supply and demand, elasticity of demand and supply, consumer choice theory, production and cost theory and market structures. Three hours, 3 credits.

#### **EDUCATION**

**EDU 1613 FOUNDATIONS IN EDUCATION -** Survey of the history and philosophies of American education with special emphasis on current issues and problems in education. Includes a minimum of 30 hours field experience. Three hours, 3 credits.

#### **ENGLISH**

**ENG 0114 BEGINNING ENGLISH AND READING** –This integrated course is designed to develop basic writing skills and reading strategies. Four hours, 4 credits.

**ENG 0124 INTERMEDIATE ENGLISH AND READING**—This integrated course is designed to advance students to college-level writing skills and reading strategies. Four hours, 4 credits.

**ENG 1113 ENGLISH COMPOSITION I** – This course prepares the students to think critically and compose texts for academic and professional rhetorical situations. Three hours, 3 credits.

**ENG 1123 ENGLISH COMPOSITION II** –This course a continuation of English Composition I with emphasis on research, argumentation, and composition. Readings, essays, and research paper are required. Three hours, 3 credits.

**ENG 2223 AMERICAN LITERATURE I** – This course surveys representative prose and poetry of the United States from its beginnings to the Civil War. Pre-requisite: ENG 1113. Three hours, 3 credits.

**ENG 2233 AMERICAN LITERATURE II** – This course surveys representative prose and poetry of the United States from Civil War to the present. Three hours, 3 credits.

**ENG 2423 WORLD LITERATURE I** – This course surveys texts representative of global, historical, and cultural diversity from the ancient world through the early modern world. Pre-requisite: ENG 1113. Three hours, 3 credits.

**ENG 2433 WORLD LITERATURE II** – This course surveys text representative of global, historical, and cultural diversity from the Enlightenment Period to the present. Three hours, 3 credits.

**ENG 2513 SURVEY OF AFRICAN-AMERICAN LITERATURE** – ENG 2513 surveys African-American literature from its beginnings to the present. Three hours, 3 credits.

#### **EDUCATIONAL PSYCHOLOGY**

**EPY 2513 CHILD PSYCHOLOGY** - A study of various aspects of human growth and development during childhood and emerging adolescence. Topics include biological, psychosocial and cognitive development. Three hours, 3 credits.

EPY 2523 ADOLESCENT PSYCHOLOGY - A study of human growth and development

during adolescence. This includes physical, cognitive and psychosocial development. Three hours, 3 credits.

**EPY 2533 HUMAN GROWTH AND DEVELOPMENT** - A study of various aspects of human growth and development from conception through death. Topics include biological, psychosocial and cognitive development. Three hours, 3 credits.

#### HEALTH, PHYSICAL EDUCATION, RECREATION

**HPR 1111 GENERAL PHYSICAL EDUCATION ACTIVITIES I** – This course is designed to give students a modern concept of physical education and recreation by developing body skills. 1 hour, 1 credit.

**HPR 1121 GENERAL PHYSICAL EDUCATION ACTIVITIES II** – This course is designed to give students a modern concept of physical education and recreation by developing body skills. 1 hour, 1 credit.

| HPR 1131 VARSITY SPORTS II- Participation in                 |  |  |
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| HPR 1141 VARSITY SPORTS II - Participation in varsity sport. |  |  |

**HPR 1213 PERSONAL AND COMMUNITY HEALTH** - Application of principles and practices of healthful living to the individual and community; major health problems and the mutual responsibilities of home, school, and health agencies. Three hours, 3 credits.

HPR 1313 INTRODUCTION TO HEALTH, PHYSICAL EDUCATION & RECREATION - Introduction to the objective, literature, and organizations of the profession. Analysis of successful teaching with discussion of the responsibilities and opportunity of professional personnel. Orientation of student to opportunities in the field. Three hours, 3 credits.

| HPR 1511 TEAM SPORTS I- Rules, techniques, particip         | pation a  | nd equipmen | t in (a | activities) |
|---|-----------|-------------|---------|-------------|
| •   |           |             |         |             |
| (name sport) (Title and course description change effective | e Fall 20 | 010)        |         |             |

**HPR 1551 FITNESS AND CONDITIONING TRAINING** I – Instruction and practice of basic principles of fitness and conditioning through a variety of exercises and activities. (Title and course description change effective Fall 2010)

**HPR 2111 GENERAL PHYSICAL EDUCATION ACTIVITIES III** – This course is designed to give students a modern concept of physical education and recreation by developing body skills. 1 hour, 1 credit.

**HPR 2121 GENERAL PHYSICAL EDUCATION ACTIVITIES IV** – This course is designed to give students a modern concept of physical education and recreation by developing body skills. 1 hour, 1 credit.

**HPR 2213 FIRST AID & CPR** - Instruction and practice in methods prescribed in the American Red Cross or American Heart Association standard and advanced courses. Three hours, 3 credits.

HPR 2323 RECREATIONAL LEADERSHIP - Planning and leadership techniques for

conducting community recreation centers, playgrounds, parks, and school recreation programs. Three hours, 3 credits.

**HPR 2723 PREVENTION AND CARE OF ATHLETIC INJURIES** – Theory and practice for the prospective athletic trainer or coach in the prevention and care of athletic injuries. Three hours, 3 credits.

#### **HISTORY**

HIS 1113 WESTERN CIVILIZATION I - This is a general survey of Western Civilization from ancient times to mid-seventeenth century. Three hours, 3 credits.

HIS 1123 WESTERN CIVILIZATION II - This is a general survey of Western Civilization since the seventeenth century. Three hours, 3 credits.

HIS 1613 SURVEY OF AFRICAN-AMERICAN HISTORY – This is a survey of African American history from African origins to modern times. Three hours, 3 credits.

**HIS 2213 AMERICAN (U.S.) HISTORY I** - This is a survey of American (U.S.) history to 1877. Three hours, 3 credits.

HIS 2223 AMERICAN (U.S.) HISTORY II - This is a survey of American (U.S.) history since 1865. Three hours, 3 credits.

#### **HONORS**

**HON 1913 Honors Leadership Forum I** - Admission is by invitation only. This course has as its central focus the development of leadership skills. It is designed to provide a basic understanding of leadership and group dynamics theory and to assist the student in developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and an awareness of one's own style of leadership. This course integrates readings from the humanities, classic works of literature, and experimental learning exercises with readings and discussions of traditional theories. Three hours, 3 credits.

**HON 1921 Honors Forum II** - Admission is by invitation only. Interdisciplinary studies of selected issues confronting the individual and society with discussions led by scholars, faculty, and/or students. One hour, 1 credit.

**HON 2911 Honors Forum III** - Admission is by invitation only. Interdisciplinary studies of selected issues confronting the individual and society with discussions led by scholars, faculty, and/or students. One hour, 1 credit.

**HON 2921 Honors Forum IV** - Admission is by invitation only. Interdisciplinary studies of selected issues confronting the individual and society with discussions led by scholars, faculty, and/or students. One hour, 1 credit.

#### **LEADERSHIP**

**LEA 1811 Leadership and Organization Skills I -** A study of leadership styles and skills, roles and functions of officers of student organizations. Includes parliamentary procedure, chain of command,

communication, conducting effective meetings, role of constitution/by-laws, principle of ethics, etiquette, and working with volunteers. One hour, 1 credit.

**LEA 1821 Leadership and Organization Skills II -** Continued study of LEA 1811, ice breakers; non-verbal communication; role of functions in groups; power; time management; stress management; role of constitution; Personal Style type indicator; planning and goal setting; leadership mentoring. One hour, 1 credit.

#### **LEARNING & LIFE SKILLS**

**LLS 0113 ESSENTIAL COLLEGE SKILLS I** - This course is designed to aid in the development of student potentials in the following fundamental areas; improving student confidence, setting life goals, developing effective study skills and habits and developing classroom learning skills. The course emphasizes reasoning skills, interpersonal skills, personal and social adjustment. Three hours, 3 credits. Non-transferable Credit.

LLS 0123 ESSENTIAL COLLEGE SKILLS II – This course is designed to support the student in the successful completion of his or her college courses by teaching the application of specific study skills and learning strategies. Three hours, 3 credits. Non-transferable Credit.

**LLS 1311 ORIENTATION** - This course is designed to help the new college student adjust to college life. It includes a study of personal and social adjustments, and gives the student guidance in collegiate life. One hour, 1 credit.

**LLS 1323 CAREER EXPLORATION-** This course is designed to assist students in determining career goals. Interest tests, personality inventories, and aptitude tests are given to help students determine career choices. Three hours, 3 credits.

**LLS 1423 COLLEGE STUDY SKILLS-** An advanced course in study skills that fosters insight and practice of critical reading skills and study techniques needed for efficient and effective mastery of college-level courses, both graduate and undergraduate. Three hours, 3 credits.

#### **MATHMATICS**

**MAT 0123 BEGINNING ALGEBRA** - A course in algebra to include operations with real numbers, linear equations, the coordinate system, linear inequalities, exponents, operations with polynomials, and factoring. Three hours, 3 credits. Non-transferable Credit

**MAT 1233 INTERMEDIATE ALGEBRA** – The topics include linear equations and their graphs; inequalities and number line graphs; rational expressions; factoring; exponents; radicals; polynomials. Three hours, 3 credits. Non-transferable Credit

**MAT 1313 COLLEGE ALGEBRA** – This course includes inequalities; functions; linear and quadratic equations, circles, and their graphs; applications; polynomial and rational functions; logarithmic and exponential functions; systems of equations. Three hours, 3 credits.

**MAT 1323 TRIGONOMETRY** – This course includes trigonometric functions and their graphs; functions of composite angles; fundamental relations; trigonometric equations; radian measurement;

solutions of right and oblique triangles; inverse trigonometric functions; applications. Three hours, 3 credits.

MAT 1513 BUSINESS CALCULUS I - A study of functions, limits, continuity, derivatives, and their applications to business and economics. Three hours, 3 credits.

**MAT 1613 CALCULUS I** - This course includes the following topics: limits; continuity; the definition of the derivative; differentiation; applications; antiderivatives. Three hours, 3 credits.

**MAT 1623 CALCULUS II**- This course includes the following topics: the definite integral; differentiation and integration of transcendental functions, techniques of integration; applications. Prerequisite: MAT 1613. Three hours, 3 credits.

**MAT 1723 REAL NUMBER SYSTEM** – Designed for elementary and special education majors, this course includes set theory, numeration systems, foundations of number theory, and properties and operations of real numbers. Three hours, 3 credits.

**MAT 2113 INTRODUCTION TO LINEAR ALGEBRA** - This course includes the following topics: systems of linear equations; matrices; vector spaces; determinantes; orthogonality; linear transformations; applications; eigenvalues and eigenvectors.

MAT 2323 STATISTICS- This course introduces statistical methods of describing, summarizing, comparing, and interpreting data to include probability distributions, sampling, estimation, confidence intervals, and hypothesis testing. Pre-requisite: MAT 1233. Three hours, 3 credits

**MAT 2613 CALCULUS III** - This course includes the following topics: analytical geometry; parametric equations; polar coordinates; improper integrals, infinite series. Prerequisite: MAT 1623. Three hours, 3 credits.

MAT 2623 CALCULUS IV –This course includes the following topics: partial differentiation; optimization; multiple integration; vector calculus; quadric surfaces and line integrals; divergence theorem; Stokes' Theorem. Prerequisite: MAT 2613. Three hours, 3 credits.

MAT 2913 DIFFERENTIAL EQUATIONS- This course includes the following topics; solutions of first and higher order differential equation, existence theorems, Laplace transforms; applications.

#### **MODERN & FOREIGN LANGUAGE**

**MFL 1213 SPANISH I** –This course is an oral-aural approach, which stresses conversation, pronunciation, listening, comprehension, reading, writing, and functional grammar with emphasis on communication. Three hours, 3 credits.

**MFL 1223 SPANISH II** – This course continues MFL 1213 with wider vocabulary and more complex structures and functions. Three hours, 3 credits.

**MFL 2213 SPANISH III** – This course continues MFL 1223 with additional materials of literary and cultural value. Three hours, 3 credits.

**MFL 2223 SPANISH IV** – This course continues MFL 2213 with additional literary and cultural readings and compositions as well as a review of essential elements of grammar. Three hours, 3

credits.

MFL 2513 OCCUPATIONAL SPANISH – This course is designed to teach basic oral communication skills for interaction in Spanish in an occupational setting. Specialized variations of this course include: Law Enforcement, Medical and Business. Three hours, 3 credits.

#### MUSIC APPLIED

**MUA 1411 CLASS PERCUSSION I-** Percussion instruction for music majors and non-music majors. Designed to teach the fundamental principles of playing, explore varied levels of literature and develop the student's interest in playing.

**MUA 1472 PERCUSSION FOR MUSIC EDUCATION I-** Percussion instruction for music majors and advanced non-music majors with an emphasis on percussion instrumental playing. Designed to teach the fundamental principles of playing, explore moderate to advanced levels of literature and develop the student's interest in playing.

## MUA 1511, 1521, 2511, 2521 CLASS PIANO FOR MUSIC MAJORS I, II, III, & IV –MUA 1572, 1582, 2572, 2582 PIANO FOR KEYBOARD MAJORS (MUSIC EDUCTION) I, II, III,

& IV – Class piano instruction for music majors with no previous piano training. This curriculum is designed to prepare students for their piano proficiency examination upon transfer to university.

MUA 1572 PIANO FOR KEYBOARD MAJORS- Individual piano instruction including technique, appropriate repertoire, and memorization.

**MUA 1711 Class Voice I-** Class voice is designed to teach the fundamental principles of singing, explore elementary to moderate levels of vocal literature and develop and improve the student's vocal ability in a group setting

# MUA 1772, 1782, 2772, 2782 VOICE FOR VOCAL MUSIC EDUCATION MAJORS I, II, III, & IV –Voice for vocal music education majors is designed to teach the fundamental principles of singing, explore varied vocal literature, and develop and improve the student's singing ability.

MUA 1872, 1882, 2872, 2882 WOODWINDS FOR MUSIC EDUCATION- Woodwind instruction for music education majors and advanced non-music majors with an emphasis on woodwind instrumental playing. Designed to teach the fundamental principles of playing, explore moderate to advanced levels of literature, develop the student's interest in playing, and strengthen the student's playing ability.

#### MUA 1172, 1182, 2172, 2182 BRASS FOR MUSIC EDUCATION MAJORS I, II, III, & IV -

Brass instruction for music education majors and advanced non-music majors with an emphasis on brass instrumental playing. Designed to teach the fundamental principles of playing, explore moderate to advanced levels of literature, develop the student's interest in playing and strengthen the student's playing ability.

#### **MUA 1472, 1482, 2472, 2482 PERCUSSION FOR MUSIC EDUCATION I, II, III, & IV** –

Percussion instruction for music majors, with an emphasis on percussion instrumental playing. Designed to teach the fundamental principles of playing, explore moderate to advanced levels of literature and develop the student's interest in playing.

MUS 2513 MUSIC FOR ELEMENTARY TEACHERS - Designed for the needs of the

elementary education student. Essentials of public school music; study of the fundamentals of music. Reading music notations and terminology. Three hours, 3 credits.

#### **MUSIC ORGANIZATIONS**

**MUO 1111 BAND I** – Designed to teach the fundamental principles of playing musical instruments explore varied levels of literature and develop the student's knowledge of performance techniques. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 1121 BAND II** – Designed to teach the fundamental principles of playing musical instruments explore varied levels of literature and develop the student's knowledge of performance techniques. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 1211 CHOIR I**– A course for music majors and non-majors focused on performing choral music from a variety of style periods. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 1221 CHOIR II** – A course for music majors and non-majors focused on performing choral music from a variety of style periods. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 1241 SELECT VOICE ENSEMBLE-** A course for select singers focused on performing from one or more genres of music. 1 credit hour.

**MUO 1151 SMALL MIXED ENSEMBLE-** Designed to explore varied levels of literature and develop the student's knowledge of performance technique in small ensembles and auxiliary groups.

**MUO 2111 BAND III** – Designed to teach the fundamental principles of playing musical instruments explore varied levels of literature and develop the student's knowledge of performance techniques. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 2121 BAND IV** – Designed to teach the fundamental principles of playing musical instruments explore varied levels of literature and develop the student's knowledge of performance techniques. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 2211 CHOIR III** – A course for music majors and non-majors focused on performing choral music from a variety of style periods. Prerequisite: Instructor Approval. 1 credit hour.

**MUO 2221 CHOIR IV** – A course for music majors and non-majors focused on performing choral music from a variety of style periods. Prerequisite: Instructor Approval. 1 credit hour.

#### MUSIC FOUNDATIONS

**MUS 1113 MUSIC APPRECIATION** - A course designed to give the student, through listening and written work, the ability to understand, appreciate, and evaluate music of Western Culture. Three hours, 3 credits.

MUS 1123 MUSIC SURVEY – Advanced listening course, designed to acquaint the music major with a broad overview of musical style and repertoire from antiquity to the present.

**MUS 1133 FUNDAMENTALS OF MUSIC** - Study of basic knowledge of music fundamentals to prepare students for music theory. Concepts include: notation, scales, keys, rhythm, intervals, triads, and their inversions.

MUS 1211 MUSIC THEORY LAB- Lab instruction. Development of music sight-singing, ear

training and dictation skills. One hour, 1 credit.

musical performances per semester also required.

MUS 1213 MUSIC THEORY LECTURE- Study of functional harmony through analysis and partwriting. Three hours, 3 credits.

MUS 1214 MUSIC THEORY I Lecture/Lab- Study of functional harmony through analysis, part-writing, sight-singing, and ear training. This course includes lab instruction in sight-singing, ear training, and dictation

MUS 1224 MUSIC THEORY II Lecture/Lab – Continued study of functional harmony through analysis, part-writing, sight-singing, and ear training. This course includes lab instruction in sight-singing, ear training, and dictation.

MUS 1911, 1921, 2911, 2921 RECITAL CLASS I, II, III, & IV - MUS 1413 BASIC COMPUTER SKILLS FOR MUSICIANS — Performances of solo and ensemble literature by students majoring in music. Attendance at a prescribed minimum number of departmentally approved

MUS 2513 MUSIC FOR ELEMENTARY TEACHERS- Designed for the needs of the elementary education student. Essentials of public school music; study of the fundamentals of music. Reading music notations and terminology. Three hours, 3 credits.

#### **PHYSICS**

PHY 2241 PHYSICAL SCIENCE I, Laboratory – A laboratory course that contains experiments and exercises that reinforce the principles introduced in PHY 2243 Physical Science Survey I, Lecture. Co-requisite: PHY 2243. Two hours, 1 credit.

PHY 2243 PHYSICAL SCIENCE I, Lecture – A lecture course that includes studies of measurements and units, electricity, mechanics, heat, sound, light, and astronomy. Co-requisite: PHY 2241. Three hours, 3 credits.

PHY 2251 PHYSICAL SCIENCE II, Laboratory – A laboratory course that contains experiments and exercises that reinforce the principles introduced in PHY 2253 Physical Science Survey II, Lecture. Co-requisite: PHY 2253. Two hours, 1 credit.

**PHY 2253 PHYSICAL SCIENCE II, Lecture** – A lecture course that includes studies of chemistry, geology, and meteorology. Co-requisite: PHY 2251. Three hours, 3 credits.

**PHY 2511 GENERAL PHYSICS I-A, Laboratory -** A laboratory course that contains experiments and exercises that reinforce the principles introduced in PHY 2513 General Physics I- A, Lecture. Corequisite: PHY 2513. Two hours, 1 credit.

**PHY 2513 GENERAL PHYSICS I-A, Lecture -** A lecture course covering mechanics and conservation laws. This is a calculus based course primarily for students of engineering, science, or mathematics. Co-requisite: PHY 2511. Three hours, 3 credits.

**PHY 2521 GENERAL PHYSICS II-A, Laboratory -** A laboratory course that contains experiments and exercises that reinforce the principles introduced in PHY 2523 General Physics II-A, Lecture. Two hours, 1 credit.

PHY 2523 GENERAL PHYSICS II-A, Lecture—A lecture course covering electricity, magnetism, and optics. This is a calculus-based course primarily for students of engineering, science, and mathematics. Three hours, 3 credits.

#### POLITICAL SCIENCE

**PSC 1113 AMERICAN NATIONAL GOVERNMENT** - Survey of the foundations, institutions, and political aspects of American national government. Three hours, 3 credits.

**PSC 1123 AMERICAN STATE AND LOCAL GOVERNMENT** – Survey of the relationship among American local, state, and national governments, and the organization, function, and operation of different levels of government. Three hours, 3 credits.

#### **PSYCHOLOGY**

**PSY 1513 GENERAL PSYCHOLOGY** - An introduction to the scientific study of human behavior and mental processes. This includes history and theories of psychology, research methods, biological bases of behavior, the principles of learning, personality and abnormal behavior. Three hours, 3 credits.

#### **SOCIAL WORK**

**SOC 1113 INTRODUCTION TO SOCIAL SCIENCE** – This course gives students insights into people's behavior by examining ideas from various social sciences. Three hours, 3 credits.

**SOC 2113 INTRODUCTION TO SOCIOLOGY**— The course introduces the scientific study of human society and social interaction and examines social forces on individuals and groups. Three hours, 3 credits.

**SOC 2133 SOCIAL PROBLEMS** - This course is a study of the theoretical analysis, nature, scope, and effects of contemporary social problems and policy measures used to address them. Three hours, 3 credits.

**SOC 2143 MARRIAGE AND FAMILY** A study of the development of marriage and family as social institutions within society. Three hours, 3 credits.

#### **SPEECH & THEATRE**

**SPT 1113 PUBLIC SPEAKING I** – Study and practice in making speeches for a variety of public forums. Major emphasis is placed on speech preparation and delivery. Three hours, 3 credits.