

# ACADEMIC COURSE DESCRIPTIONS

The following course descriptions indicate the number of lectures and laboratory periods per week. Credit is awarded in terms of semester hours. The last digit in the course number always indicates the hours credit awarded for satisfactory completion.

## ACCOUNTING

### **ACC 1213 — 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 and controls for service and merchandising businesses, assets, liabilities, and equity. Three lectures. Three hours credit.

### **ACC 1223 — Principles of Accounting II (Prerequisite: ACC 1213).**

A continuation of ACC 1213. The topics to be covered include corporate accounting concepts, managerial accounting concepts and internal business decision making. Three lectures. Three hours credit.

## ART

### **ART 1113 — Art Appreciation.**

A simple approach to the understanding of the visual arts on a conceptual basis. Three lectures. Three hours credit.

### **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. Six lab hours. Three hours credit.

### **ART 1323 — Drawing II (Prerequisite: ART 1313).**

Continuation of rendering skills introduced in Drawing I with emphasis on color, composition, and creative expression. Required for art majors. Six lab hours. Three hours credit.

### **ART 1433 — Design I.**

To provide students with an understanding of the elements and principles of design to enable development of an informed, intuitive sense as well as a highly informed skills base/ methodology involving black and white design problems which apply principles and elements of visual design. Six lab hours. Three hours credit.

**ART 1443 — Design II.**

To provide students with an understanding of color theory and applications of color so that there begins to be an informed as well as intuitive sense of seeing, mixing, and applying color and light to design problems. Six lab hours. Three hours credit.

**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 various media. Six lab hours. Three hours credit.

**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 lectures. Three hours credit.

**ART 2513 — Painting I.**

Techniques used in painting media in a variety of subject matter. Six lab hours. Three hours credit.

**ART 2523 — Painting II.**

Advanced problems in painting media. Six lab hours. Three hours credit.

**ART 2613 — Ceramics I.**

This course is directed toward an introduction to different aspects and materials of ceramic design. Instruction covers forming and shaping by hand and by mechanical means, various kiln operations, understanding the nature of clay and glazes and an appreciation of functional and non-functional forms. Six lab hours. Three hours credit.

**ART 2713 — Art History I.**

Survey course of historical background of art forms from Prehistoric to Renaissance. Emphasis is on painting, architecture, and sculpture as related to history. Three lectures. Three hours credit.

**ART 2723 — Art History II.**

A survey of historical background of art forms from Renaissance to present with special emphasis on contemporary expressions. Three lectures. Three hours credit.

## BUSINESS ADMINISTRATION

### **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 lectures. Three hours credit

### **BAD 2323 — Business Statistics. (Prerequisite: MAT 1313).**

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. Three lectures. Three hours credit

### **BAD 2413 — The 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 lectures. Three hours credit

### **BAD 2513 — Principles of Management (This is considered an upper level course at some universities and may not transfer).**

The course examines major theories of organizations, focusing on their structures and the behavior of individuals and groups who affect and are affected by organizational relationships and activities. An understanding of these concepts contains implications for managerial effectiveness. Selected aspects of organizational psychology and administrative behavior are reviewed relative to motivational approaches and incentives, group dynamics, leadership, and control. Approach to organizational design, change, and development are emphasized. Other topics covered in the course include problem-solving, goal development, group structure, attitude formation, field theory, and learning models. Three lectures. Three hours credit.

### **BAD 2533 — Computer Applications in Business & Industry (Prerequisite: Keyboarding skills).**

This course is an introduction to MS Office Suite software, which is the industry standard. This software includes the components of an information system: spreadsheets, presentation graphics, database management, and word processing. Data entry and retrieval, records management, and electronic communications are skills taught in this course. Three lectures. Three hours credit.

**BAD 2713 — Principles of Real Estate.**

The course deals with the nature of the real estate market, types of ownership of property, contracts, methods of transferral of title, instruments used in transfer, title closing, financing, property management, insuring, and appraising. Three lectures. Three hours credit.

**BAD 2723 — Real Estate Law.**

Designed to give the student a general background in the law of real property and the law of real estate brokerage. Three lectures. Three hours credit.

**BAD 2733 — Real Estate Finance.**

A study of principles and methods of financing real estate, sources of funds, types and contents of financing instruments, and the role of various institutions, both private and governmental. Three lectures. Three hours credit.

**BAD 2744 — Real Estate Appraisal I (Prerequisite: BAD 2713 or Real Estate Sales or Broker License).**

An introductory course. Includes purpose of appraisal, methods, and techniques to determine the value of the various types of property. Emphasis on residential and single unit property. Four lectures. Four hours credit

**BAD 2813 — Administrative Communications (Prerequisite: ENG 1113).**

A written and oral application-oriented communication course with an emphasis on developing and writing business correspondence, reports, and oral briefings from a managerial approach. Three lectures. Three credit hours.

**BAD 2843 — Industrial Safety.**

A comprehensive study of ASHA regulations for industrial site safety and implementation methods for compliance. Three lectures. Three credit hours.

**BAD 2853 — Business Ethics.**

This course is an philosophical exploration of the ethical problems faced in business and how to recognize, analyze, and implement ethical solutions within the multi-valued contexts of the various fields of today's business environment. Three lectures. Three credit hours.

## BIOLOGY

### **BIO 1114 — Principles of Biology I.**

An introduction to the basic principles of modern biology and their relevance to human life. Topics include: the nature and history of scientific thought, the scientific method, basic biological chemistry, cellular structure, cellular processes, cell division, and transmission genetics. This course is designed for non science-related majors, and DOES NOT SATISFY the prerequisite for more advanced courses. Three lectures. Two hours laboratory. Four hours credit.

### **BIO 1124 — Principles of Biology II.**

An introduction to the basic principles of modern biology and their relevance to human life. Topics include: a survey of kinds of organisms, human biology, ecology, and discussions of issues pertinent to human health and environmental issues. This course is designed for non science-related majors, and DOES NOT SATISFY the prerequisite for more advanced science courses. Three lectures. Two hours laboratory. Four hours credit.

### **BIO 1134 — General Biology I for Majors (Prerequisite: MAT 0123 or higher or placement score for MAT 1233 or higher).**

A combined lecture and laboratory course for science majors. The topics covered include cell chemistry, cell structure, energy transformation, enzymes, energy pathways, cell reproduction, embryology, genetics, DNA structure and function, and gene regulation and engineering. Three lectures. Two hours laboratory. Four hours credit.

### **BIO 1144 — General Biology II for Majors (Prerequisite: MAT 0123 or higher or placement score for MAT 1233 or higher).**

A combined lecture laboratory course for majors. This course is an introduction to the diversity of life starting with evolution and leading to the major the kingdom systems. Emphasis is placed on the concepts of evolution, schemes of classification, and descriptions of the ecology, anatomy and physiology of major taxa with an emphasis on plants and animals. The lab reinforces the principles introduced in the lecture. Three lectures. Two hours laboratory. Four hours credit.

### **BIO 1314 — Botany I (Prerequisite: MAT 0123 or higher or placement score for MAT 1233 or higher).**

A combined lecture and laboratory course covering the representative groups of the plant kingdom, their anatomy, physiology, taxonomy, and economic importance. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

**BIO 1613 — Nutrition (Prerequisite: MAT 0123 or higher or placement score for MAT 1233 or higher).**

This course is a study of nutrients required for normal growth and applied to the selection of food for ingestion, metabolic process of digestion, assimilation and absorption. Three lectures. Three hours credit.

**BIO 2414 — Zoology I (Prerequisite: MAT 0123 or higher or placement score for MAT 1233 or higher).**

A combined lecture and laboratory course that includes in-depth studies of phylogeny and classification systems, protozoa, and major invertebrate phyla. Labs associated with this course contain experiments and exercises to reinforce the principles introduced in lecture class. Three lectures. Two hours laboratory. Four hours credit.

**BIO 2424 — Zoology II (Prerequisite: BIO 2414).**

A combined lecture and laboratory course that includes in-depth studies of animal phyla with emphasis on the vertebrates and animal systems. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

**BIO 2514 — Anatomy and Physiology I (Prerequisite: MAT 0123 or higher or placement score for MAT 1233 or higher).**

A combined lecture and laboratory 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. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

**BIO 2524 — Anatomy and Physiology II (Prerequisite: BIO 2514).**

A combined lecture and laboratory course that includes detailed studies of the anatomy and physiology of human special senses and the endocrine, circulatory, respiratory, digestive, and urinary systems, as well as reproduction and development. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

**BIO 2924 — Microbiology (Prerequisite: BIO 1134 or higher).**

A combined lecture and laboratory course providing a survey of the microbes with emphasis on those affecting other forms of life, especially man. Labs associated with this course are devoted to lab safety and gaining hands on experience in the areas of: microscopy, culturing techniques (pure culture and isolation and media preparation), staining techniques, aseptic technique, diagnostic procedures and effectiveness of antimicrobial agents. Three lectures. Two hours laboratory. Four hours credit.

## BUSINESS & OFFICE ADMINISTRATION

### **BOA 1413—Keyboarding.**

This course will develop basic keyboarding skills using the touch method and introduce document production techniques using word processing functions. Three lectures. Three hours credit.

### **BOA 2533 — Word Processing I.**

This course studies the development of today's modern office through the use of automated equipment and trained personnel. Emphasis is placed on the organizations of word processing from input through distribution, equipment available, and role of participants in word processing systems. Three lectures. Three hours credit.

### **BOA 2553— Desktop Publishing.**

This course covers the writing, assembling, and design of publications in a business or editorial office by the use of microcomputers. The course includes an introduction to traditional publishing terminology, completion of training software, and the production of various business documents and publications. Three lectures. Three hours credit.

## CHEMISTRY

### **CHE 1114 — Chemistry Survey (Co-requisite: MAT 1233 or higher or placement score for MAT 1313 or higher).**

A combined lecture and laboratory introductory basic chemistry course that covers terminology, measurements, atomic structure, nomenclature, chemical equations and basic stoichiometry. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

### **CHE 1211 — General Chemistry Laboratory I (Co/Prerequisite: CHE 1213).**

Must be taken concurrently in phase with the lecture sequence. Selected experiments to illustrate the principles introduced in CHE 1213. Three hours laboratory. One hour credit.

### **CHE 1213 — General Chemistry I (Corequisite: MAT 1313 or appropriate placement in a higher level math course).**

A course covering the fundamental concepts of college chemistry. Topics include: atomic and molecular structure, nomenclature and chemical formulas, chemical reactions, periodical and atomic properties, stoichiometry, the mole concept, bonding, and gases. Three lectures. Three hours credit.

**CHE 1221 — General Chemistry Laboratory II (Prerequisite: CHE 1211 & 1213).**

A continuation of CHE 1211. Must be taken with the lecture sequence or after finishing the lecture sequence. Three hours laboratory. One hour credit.

**CHE 1223 — General Chemistry II (Prerequisite: CHE 1213).**

A continuation of CHE 1213 with emphasis on the following topics: solutions, acid-base theories, thermodynamics, kinetics, equilibria, and electrochemistry. Three lectures. Three hours credit.

**CHE 2424 — Organic Chemistry I (Prerequisite: CHE 1223).**

A combined lecture and laboratory course that covers carbon chemistry, bonding structure, and behavior; aliphatic compounds; stereochemistry and reaction mechanisms. Labs associated with this course acquaint students with important manipulations and procedures, and the preparation and study of organic compounds. Three lectures. Three hours laboratory. Four hours credit.

**CHE 2434 — Organic Chemistry II (Prerequisite: CHE 2424).**

A continuation of CHE 2424. A combined lecture and laboratory course that covers spectroscopy, aromatic compounds, carbonyl compounds and other complex compounds, with emphasis on reactions, reaction mechanisms, and nomenclature. Labs associated with this course acquaint students with important manipulations and procedures, as well as the preparation and study of aromatic and complex organic compounds. Three lectures. Three hours laboratory. Four hours credit.

## COMPUTER SCIENCE

**CSC 1113 — Computer Concepts (Prerequisite: Minimum typing skill of 20 wpm & MAT 0123 or higher or placement score for MAT 1233 or higher).**

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 lectures. One hour laboratory. Three hours credit.

**CSC 1123 — Computer Applications I. (Prerequisite: Minimum typing skills of 20 wpm & MAT 0123 or higher or placement score for MAT 1233 or higher).**

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. Two lectures. Two hours laboratory. Three hours credit.

### **CSC 1213 - Visual BASIC Computer Programming I.**

This course is designed to introduce the writing of event-driven programs using the Visual BASIC computer programming language with emphasis on problem solving, documentation, program statements, algorithms, and common routines. Course has lecture and lab components. Three hours credit.

### **CSC 1223 - Visual BASIC Computer Programming II ( Pre-requisite: CSC 1213).**

This course is designed as a continuation of CSC 1213 with advanced event-driven programming concepts using the Visual BASIC language with emphasis on functions, modules, search and sort algorithms, sequential access, random access, and external file management. Course has lecture and lab components. Three hours credit.

### **CSC 1613 — Computer Programming I (Prerequisite: MAT 1313 or higher or placement score for MAT 1323 or higher).**

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. Course has lecture and lab components. Three hours credit.

### **CSC 2623 — Computer Programming II (Prerequisite: CSC 1613).**

Continuation of the object-oriented language from CSC 1613 and advanced program development; algorithm analysis; string processing; recursion; internal search/sort methods; simple data structures; debugging and testing of larger programs. Course has lecture and lab components. Three hours credit.

## **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 lectures. Three hours credit.

### **CRJ 1323 – Police Administration & Organization.**

Principles of organization and administration in law enforcement as applied to law enforcement agencies; introduction to concepts of organizational behavior. Three lectures. Three hours credit.

### **CRJ 1343 – Police & Community Relations.**

Current issues between police and community. Role and influence of officer in community relations, tensions and conflict and the problem areas of race and juveniles. Three lectures. Three hours credit.

**CRJ 1363 – Introduction to Corrections.**

An overview of the correctional field; its origins, historical and philosophical background, development, current status, relationship with other facets of the criminal justice system and future prospects. Three lectures. Three hours credit.

**CRJ 1383 – Criminology.**

The nature and significance of criminal behavior. Theories, statistics, trends, and programs concerning criminal behavior. Three lectures. Three hours credit.

**CRJ 2213 – Traffic Law.**

An examination of the role of government in coping with traffic problems. Emphasis is placed on the history, development, and enforcement of statutes pertaining to motor vehicles. Three lectures. Three hours credit.

**CRJ 2313 – Police Operations.**

A study of the operation and administration of law enforcement agencies. Particular emphasis is placed on the functions of the patrol division. Three lectures. Three hours credit.

**CRJ 2323 – Criminal Law.**

Basic elements of criminal law under the Constitution of the United States, state Constitutions, and federal and state statutes. Three lectures. Three hours credit.

**CRJ 2333 – Criminal Investigation.**

Fundamentals, search and recording, collection and preservation of evidence, finger printing, photography, sources of information, interviews and interrogation. Follow up. Three lectures. Three hours credit.

**CRJ 2393 – Survey of Criminalistics.**

The study of scientific crime detection methods; modus operandi, crime scene search, preservation of evidence, research projects and class participation required. Three lectures. Three hours credit.

**CRJ 2513 – Juvenile Justice.**

The role of police in juvenile delinquency and control. Organization, functions, and jurisdiction of juvenile agencies. Processing, detention, and disposition of cases. Statutes and court procedures applied to juveniles. Three lectures. Three hours credit.

## ECONOMICS

### **ECO 2113 — Principles of Macroeconomics. (Prerequisite: MAT 0123 or placement test score of MAT 1233 or higher).**

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 lectures. Three hours credit.

### **ECO 2123 — Principles of Microeconomics. (Prerequisite: MAT 0123 or placement test score of MAT 1233 or higher).**

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 structure. Three lectures. Three hours credit

## ENGINEERING

### **EGR 2413 — Engineering Mechanics I (Statics) (Prerequisite: PHY 2514).**

Vector Algebra, force systems, equilibrium, moments, machines, frames, trusses, friction, centroids, inertia. Three lectures. Three hours credit.

## ENGLISH

### **ENG 0113 — Beginning English .**

Designed to meet the needs of students whose skills in written communication require some standardization. Emphasis is on Basic English grammar through varied writing assignments with a review of mechanics, sentence patterns, and correct usage. Three lectures. Three hours institutional credit. (Not designed to transfer).

### **ENG 0123 — Intermediate English (Prerequisite: ENG 0113 with C or appropriate placement score).**

Designed to prepare students for English Composition. Concepts covered include paragraph and essay development with an emphasis on content and structure. Grammar skills related to the writing process are reviewed. Three lectures. Three hours institutional credit. (Not designed to transfer).

### **ENG 1113 — English Composition I (Prerequisite: ENG 0123 with C or appropriate placement score).**

Designed to prepare the student for writings required in college and the workplace with an emphasis on effective paragraph and essay development. Three lectures. Three hours credit.

**ENG 1123 — English Composition II (Prerequisite: ENG 1113).**

A continuation of ENG 1113 with emphasis on research and composition. Readings, essays, and a research paper are required. Three lectures. Three hours credit.

**ENG 2133 — Creative Writing I (Prerequisite: ENG 1113).**

Involves writing poetry, short fiction, creative nonfiction, and drama. Three lectures. Three hours credit.

**ENG 2143 — Creative Writing II (Prerequisite: ENG 2133).**

A continuation of writing poetry, short fiction, creative nonfiction, and drama. Three lectures. Three hours credit.

**ENG 2223 — American Literature I (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).**

Surveys representative prose and poetry of the United States from its beginnings to the Civil War. Three lectures. Three hours credit.

**ENG 2233 — American Literature II (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).**

Surveys representative prose and poetry of the United States from Civil War to the present. Three lectures. Three hours credit.

**ENG 2323 — British Literature I (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).**

Surveys British Literature from the Anglo-Saxon Period through the Restoration and Eighteenth Century. Three lectures. Three hours credit.

**ENG 2333 — British Literature II (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).**

Surveys British Literature from the Romantic Period through the Twentieth Century. Three lectures. Three hours credit.

**ENG 2423 — World Literature I (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).**

Surveys literature from the ancient world through the Renaissance. Three lectures. Three hours credit.

**ENG 2433 — World Literature II (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).**

Surveys literature from the Neoclassical Period through the Twentieth Century. Three lectures. Three hours credit.

## EDUCATIONAL PSYCHOLOGY

### **EPY 2513 — Child Psychology.**

A study of the various aspects of human growth and development during childhood. Topics include physical, psychosocial & cognitive development from conception into emerging adolescence. Three lectures. Three hours credit.

### **EPY 2523 — Adolescent Psychology**

A study of human growth and development during adolescence. This includes physical, cognitive and psychosocial development. Three lectures. Three hours credit.

### **EPY 2533 — Human Growth and Development.**

A study of human growth and development from conception through late adulthood, including death and dying. Topics include physical, psychosocial and cognitive development with implications for health professionals and others who work with people. Three lectures. Three hours credit.

## FAMILY AND CONSUMER SERVICE

### **FCS 1253 — Nutrition in Health Care (Prerequisite: MAT 1203 or higher or placement score for MAT 1233 or higher).**

This course is a study of nutrients required for normal growth and applied to the selection of food for ingestion, metabolic process of digestion, assimilation and absorption. Three lectures. Three hours credit.

## GEOGRAPHY

### **GEO 1113 — World Geography.**

A regional survey of the basic geographic features and major new developments of the nations of the world. Emphasis upon the interrelationship of various nation-states, physical and cultural diversity, and economic, political, strategic, and environmental issues. Three lectures. Three hours credit.

## GRAPHICS AND DRAWING

### **GRA 1143 — Graphic Communication (Corequisite: MAT 1233).**

Graphic communication using freehand sketching, instruments, orthographic projection, geometric construction, sections, dimensioning, and descriptive geometry. Techniques and procedures in presenting screws, bolts, rivets, thread types, gears, and cams. Two lectures. Four hours laboratory. Three hours credit.

### **GRA 1153 — Technology Graphics (Prerequisite: GRA 1143).**

Machine drafting methods and practice in pictorial and orthographic projections. Techniques and procedures in presenting screws, bolts, rivets, thread types, gears, cams and design and working drawings; concepts of descriptive geometry and computer aided drawing. Six hours laboratory. Three hours credit.

## HISTORY

### **HIS 1113 — Western Civilization I.**

A general survey of European history from ancient times to the mid-seventeenth century. Three lectures. Three hours credit.

### **HIS 1123 — Western Civilization II.**

A general survey of European history since the seventeenth century. Three lectures. Three hours credit.

### **HIS 1163 — World Civilization I.**

A general survey of world history from ancient times to the 1500s. Three lectures. Three hours credit.

### **HIS 1173 — World Civilization II.**

A general survey of world history from the 1500s to modern times. Three lectures. Three hours credit.

### **HIS 2213 — American (U.S.) History I.**

This is a survey of American (US) history from pre-history through Reconstruction. Three lectures. Three hours credit.

### **HIS 2223 — American (U.S.) History II.**

This is a survey of American (US) history from pre-history from Reconstruction to the present. Three lectures. Three hours credit.

## HEALTH, PHYSICAL EDUCATION AND RECREATION

### **HPR 1111, 1121, 2111, 2121 — General PE Activities I, II, III, IV.**

This course is designed to give students a modern concept of physical education and recreations by developing body skills. Credit for this activity will be given to Cheerleaders and Dazzlers. Four practice sessions. One hour credit.

### **HPR 1131, 1141, 2131, 2141 — Varsity Sports I, II, III, IV.**

Participation in basketball (4), football (4), softball (4), cross-country (2), track (2), baseball (4), tennis (4), golf (4), or soccer (4). Open by invitation of instructor. Four practice sessions. One hour credit.

### **HPR 1213 — Personal and Community Health I.**

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 lectures. Three hours credit.

### **HPR 1313 — Introduction to Health, Physical Education and Recreation.**

Introduction to the objectives, literature, and organizations of the profession. Analysis of successful teaching with discussion of the responsibilities and opportunities of professional personnel. Orientation of student to opportunities in the field. Three lectures. Three hours credit.

### **HPR 1511 — Team Sports I.**

Lecture on rules and techniques and practice in basketball, volleyball, or softball. Two classes. One hour credit.

### **HPR 1521 — Team Sports II.**

Lecture on rules and techniques and practice in basketball. Two classes. One hour credit.

### **HPR 1531 — Individual and Dual Sports I.**

Lecture on rules, techniques, equipment used, and practice in tennis or archery. Two classes. One hour credit.

### **HPR 1551, 1561, 2551, 2561 — Fitness and Conditioning Training I, II, III, IV.**

Includes weight training (free weights or machines), running, or aerobic conditioning. A student may earn only one hour's credit per course number even if the course number is repeated. Two classes. One hour credit.

### **HPR 1613— Physical Education in the Elementary School.**

Methods and materials of teaching physical education at the elementary school level. Theory and practical experience in selecting, organizing, and directing activities for the elementary school. Educational and physical education philosophy and objectives are stressed. Three lectures. Three hours credit.

**HPR 2213 — First Aid and CPR.**

Standard first aid course as outlined by the American Red Cross or American Heart Association or nationally recognized equivalent consisting of emergency assistance and treatment in cases of accident, injury, or illness pending regular surgical or medical treatment. Successful completion of every skills check-off and an 80% score on each certification exam will earn Red Cross certification in Standard First Aid, Adult CPR, Adult AED, and Infant CPR. Three lectures. Three hours credit.

**HPR 2323 — Recreational Leadership.**

Planning and leadership techniques for conducting community recreation centers, playgrounds, parks, and school recreation programs. Three lectures. Three hours credit.

**HPR 2422 — Football Theory.**

Theoretical study of football from an offensive and defensive standpoint including the fundamentals of blocking, passing, tackling, charging, punting, generalship, rules, and team play. Two lectures. Two hours credit.

**HPR 2433 — Basketball Theory**

A theoretical study of basketball from an offensive and defensive standpoint, including the fundamentals and team organization. Three lectures. Three hours credit.

**HPR 2443 — Athletic Training & Treatment of Injuries.**

A practical study of safety and first aid, taping, bandaging, and use of massage, and the uses of heat, light, and water in the treatment and prevention of injuries. Conditioning of athletes as to diet, rest, work, and proper methods of procedures in training for sports. Three lectures. Three hours credit.

**HPR 2453 — Baseball Theory.**

Philosophies of coaching, leadership, teaching techniques, team organization, baseball strategies, preparation for games, and preparation and care of baseball fields. Three lectures. Three hours credit.

**HPR 2493- Softball Theory.**

Philosophies of coaching, leadership, teaching techniques, team organization, softball strategies, preparation for games, and preparation and care of softball fields. Three lectures. Three hours credit.

## HONORS

**HON 1911, 1921, 2911, 2921 — Honors Forum I, II, III, IV.**

Interdisciplinary studies of selected issues confronting the individual and society. Discussion led by outstanding scholars, faculty, and/or students. One lecture. One hour credit.

## HUMANITIES

### **HUM 1113 — Humanities (Historical Tour).**

This course is an interdisciplinary study of human achievement using art, architecture, history, and literature as exemplifications of man's creative genius. After lectures on background material, students will participate in a tour of selected sites of historical significance in North America and/or Europe. Upon completion of the tour, an additional lecture will be conducted to provide a summary of material covered. Completion of outside reading from the course reading list and submission of a 4-7- page paper are required. Three hours credit.

## **INDUSTRIAL EDUCATION/ TECHNOLOGY TEACHER EDUCATION**

### **IED 1213 — Wood Technology.**

Study of wood production, manufacturing sales, construction industries, and experimentation of current woodworking skills. One lectures. Five hours laboratory. Three hours credit.

### **IED 1813 — Basic Electricity and Electronics.**

Study of fundamental industrial electrical and electronic principles with experimentation and project construction. One lecture. Four hours laboratory. Three hours credit. (Note - This course taught on Goodman Campus only.)

### **IED 2323 — Forging and Welding.**

Practice in hand forging; annealing, hardening, and tempering of tool steel; gas and electric welding. Six hours laboratory. Three hours credit.

### **IED 2413 — History and Appreciation of the Artcrafts.**

Growth and development of the artcrafts through the ages; instructional applications; practical designs; demonstrations and projects in leather, ceramics, woodworking and other handicraft areas. Five hours laboratory. One lecture. Three hours credit.

## JOURNALISM

### **JOU 1111, 1121, 2111, 2121 — College Publication (Yearbook I, II, III, IV).**

The course is designed to give students the ability to identify, master, and practice the skills necessary to produce the college yearbook, *Horizons*. These skills include conceptualizing the yearbook and its theme; reporting; writing headlines, copy and captions; planning and producing photographs; designing the headlines, copy, captions, and photographs on the pages; selling advertisements; and preparing the yearbook for the printer. This is an activities class open to all majors. Two hours laboratory. One hour credit.

### **JOU 1111, 1121, 2111, 2121 — College Publication (Newspaper I, II, III, IV).**

A laboratory course designed to give practical experience in working with the college newspaper, *The Growl*. Course elements include: planning, computer usage in newspaper production, proofreading, graphic design and production. Other areas covered include: planning and writing news stories, features, sports, and editorials. Ancillary items covered in the course are development of advanced skills in headline writing, copy editing, and makeup and design. Two hours laboratory. One hour credit.

## LEADERSHIP

### **LEA 1813 — Leadership & Organization Skills I.**

A study of leadership styles and skills, roles, and functions of officers of student organizations. Includes parliamentary procedure, communication, conduction effective meetings, and working with volunteers. Three lectures. Three hours credit.

### **LEA 1911, 1921, 2911, 2921 — Leadership & Communication Skills Development-Recruiting & Public Relations I, II, III, IV.**

This course familiarizes the student with his/her responsibilities as a member of the recruiting/public relations team. It explores leadership skills, communication, and factual information about the college. Through this course the student will be able to function as a representative in recruitment and in public relations. II, III, and IV are a continuation of LEA 1911. One lecture. One hour credit.

## LEARNING & LIFESKILLS

### **LLS 1313 — Orientation.**

This course is designed to help the new college student adjust to college life. It includes a study of personal and social adjustments. It teaches effective study habits, reading methods, use of the library, note taking, report writing, and gives the student guidance in collegiate life. Three lectures. Three hours credit.

### **LLS 1413 — Improvement of Study.**

This course is designed to aid the student in three basic areas: adjustment to college life, development of good study skills, and the formation of good test-taking skills. Three lectures. Three hours credit.

### **LLS 1713 — Job Search Skills.**

This course is designed to prepare students for the ever changing global market. This will prepare students for employment by teaching interviewing skills, resume writing, job attitude, job politics, employers expectations, and work ethics. Also, appropriate etiquette for interviewing during meal time and group interviewing which are being used to hire employees. Three lectures. Three hours credit.

## LIBRARY & SCIENCE

### **LIS 1111 — Library Science.**

Introduction to the technical processing of books and other library material. One lecture. One hour credit.

## MATHEMATICS

### **MAT 0113 — Fundamentals of Mathematics.**

A review of fundamental arithmetic skills. A study of the four basic operations with whole numbers, fractions, decimals, and percentages. Also covered are ratio and proportions, order of operations, and applications. Three lectures. One hour laboratory. Three hours institutional credit. (Not designed to transfer.)

### **MAT 0123 — Beginning Algebra (Prerequisite: MAT 0113 with a C or appropriate placement score for MAT 0123).**

A course in algebra to include operations with real numbers, linear equations, the coordinate system, linear inequalities, exponents, operations with polynomials, and factoring. Three lectures. One hour laboratory. Three hours institutional credit. (Not designed to transfer.)

**MAT 1233 — Intermediate Algebra (Prerequisite: MAT 0123 with a C or appropriate placement score for MAT 1233).**

The topics include linear equations and their graphs; inequalities and number line graphs; rational expressions; factoring; exponents; radicals; polynomials. Three lectures. Three hours credit.

**MAT 1313 — College Algebra (Prerequisite: MAT 1233 with a C or appropriate placement score for MAT 1313).**

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 lectures. Three hours credit.

**MAT 1323 — Trigonometry (Prerequisite: MAT 1313 or appropriate placement score for MAT 1323).**

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 lectures. Three hours credit.

**MAT 1333 — Finite Mathematics & Introduction to Calculus (Prerequisite: MAT 1313).**

An introduction to sets, functions, matrices, linear programming, and probability with applications in business decision making and behavioral sciences. Three lectures. Three hours credit.

**MAT 1513 — Business Calculus I (Prerequisite: MAT 1313).**

A study of functions, limits, continuity, derivatives, and their applications to business and economics. Three lectures. Three hours credit.

**MAT 1523 — Business Calculus II (Prerequisite: MAT 1513).**

A study of antiderivatives, techniques of integration, applications of the definite integral, extrema, and applications to business and economics. Three lectures. Three hours credit.

**MAT 1613 — Calculus I (Corequisite: MAT 1323 or appropriate placement score for MAT 1613).**

This course includes the following topics: limits; continuity; the definition of the derivative; differentiation; applications; anti-derivatives. Three lectures. Three hours credit.

**MAT 1623 — Calculus II (Prerequisite: MAT 1613).**

This course includes the following topics: the definite integral; differentiation and integration of transcendental functions; techniques of integration; applications. Three lectures. Three hours credit.

**MAT 1723 — The Real Number System (Prerequisite: MAT 0123 or appropriate placement score for MAT 1233).**

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 lectures. Three hours credit.

**MAT 1733 — Geometry, Measurement, and Probability**

**(Prerequisite: MAT 1233 or appropriate placement score for MAT 1313).**

Designed for elementary and special education majors, this course includes geometric definitions, shapes, and formulas; linear and angular measurements; unit conversions; statistics and probability. Three lectures. Three hours credit.

**MAT 2113 — Introduction to Linear Algebra (Prerequisite: MAT 1623).**

This course includes the following topics: systems of linear equations; matrices; Vector spaces; determinants; linear transformation; Eigenvalues and Eigenvectors. Three lectures. Three hours credit.

**MAT 2323 — Statistics (Prerequisite: MAT 1313).**

Introduction to statistical methods of describing, summarizing, comparing, and interpreting data to include probability distributions, sampling, estimation, confidence intervals, and hypothesis testing. Three lectures. Three hours credit.

**MAT 2613 — Calculus III (Prerequisite: MAT 1623).**

This course includes the following topics: analytical geometry; parametric equations; polar coordinates; improper integrals; infinite series. Three lectures. Three hours credit.

**MAT 2623 — Calculus IV (Prerequisite: MAT 2613).**

This course includes the following topics: partial differentiation; multiple integration; vector calculus; quadric surfaces. Three lectures. Three hours credit.

**MAT 2913 — Differential Equations (Prerequisites: MAT 2613 and concurrent enrollment in MAT 2623).**

This course includes the following topics: solution of first and higher order differential equations; existence theorems; Laplace transforms; applications. Three lectures. Three hours credit.

## MODERN FOREIGN LANGUAGE

### **MFL 1113 — Elementary French I.**

Development of basic language skills, including reading, writing, and speaking. An introduction to the culture of the French-speaking world. Three lectures. Three hours credit.

### **MFL 1123 — Elementary French II (Prerequisite: MFL 1113).**

A continuation of MFL 1113. Further development of basic language skills, including reading, writing, speaking, and conversation. Cultural information about the French-speaking world. Three lectures. Three hours credit.

### **MFL 1213 — Elementary Spanish I.**

Development of basic language skills, including speaking, reading, and writing. An introduction to the culture of the Spanish-speaking world. Three lectures. Three hours credit.

### **MFL 1223 — Elementary Spanish II (Prerequisite: MFL 1213).**

A continuation of MFL 1213. Further development of basic language skills, including reading, writing, speaking, and conversation. Cultural information about the Spanish-speaking world. Three lectures. Three hours credit.

### **MFL 2113 — Intermediate French I (Prerequisite: MFL 1123).**

A review of French grammar, and continued development of proficiency in speaking, reading, writing, and conversational skills. Understanding the culture and language of the French-speaking world is enhanced through a wide variety of multimedia and other resources. Three lectures. Three hours credit.

### **MFL 2123 — Intermediate French II (Prerequisite: MFL 2113).**

Further development of language skills with special emphasis on oral and written communication. Literary and cultural appreciation of the language is enhanced through the use of a wide variety of multimedia and other resources. Three lectures. Three hours credit.

### **MFL 2213 — Intermediate Spanish I (Prerequisite: MFL 1223).**

A review of Spanish grammar and continued development of proficiency in speaking, reading, writing, and conversational skills. Understanding the culture and language of the Spanish-speaking world is enhanced through a wide variety of multimedia and other resources. Three lectures. Three hours credit.

**MFL 2223 — Intermediate Spanish II (Prerequisite: MFL 2213).**

Further development of language skills with special emphasis on oral and written communication. Literary and cultural appreciation of the language and the Spanish-speaking world is enhanced through the use of a wide variety of multimedia and other resources. Three lectures. Three hours credit.

**MUSIC APPLIED**

**(Brass, Guitar, Percussion, Piano, Voice, and Woodwinds)**

**MUA 1141, 1151, 2141, 2151 — Brass for Non-Majors I, II, III, IV.**

Brass instruction for non-brass/music education majors. Designed to teach the fundamental principles of playing, explore moderate levels of literature and develop the student's interest in playing. One hour private instruction. Three hours practice. One hour credit.

**MUA 1172, 1182, 2172, 2182 — Brass for Music Education Majors I, II, III, IV.**

Brass instruction for music education 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. One hour private instruction. Six hours practice. Two hours credit.

**MUA 1241, 1251, 2241, 2251 — Guitar for Non-Majors I, II, III, IV.**

Guitar instruction for music education majors with guitar as a secondary area of emphasis. Introduction to classical guitar technique, literature, and performance of standard literature. One hour private instruction. Three hours practice. One hour credit.

**MUA 1272, 1282, 2272, 2282 — Guitar for Music Education Majors I, II, III, IV.**

Guitar instruction for music education majors with guitar as their area of emphasis. Introduction to classical guitar technique, literature, and performance of standard literature. One hour private instruction. Six hours practice. Two hours credit.

**MUA 1441, 1451, 2441, 2451 — Percussion for Non-Majors I, II, III, IV.**

Percussion instruction for non-percussion/music education majors. Designed to teach the fundamental principles of playing, explore moderate levels of literature and develop the student's interest in playing. One hour private instruction. Three hours practice. One hour credit.

**MUA 1472, 1482, 2472, 2482 — Percussion for Music Education Majors I, II, III, IV.**

Percussion instruction for music education 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. One hour private instruction. Six hours practice. Two hours credit.

**MUA 1511, 1521, 2511, 2521 — Class Piano I, II, III, IV.**

Class study in keyboard training is designed for students who have had no previous piano instruction. Fundamentals are taught through class participation and discussion, including major and minor scales, accompanying, transposition and elementary repertoire. This plan may, upon arrangement with the instructor, include individual instruction. Lab-based instruction. One hour credit.

**MUA 1541, 1551, 2541, 2551 — Piano for Non-Majors I, II, III, IV.**

Piano instruction for music education majors with piano as a secondary area of emphasis. Introduction to technique, literature, and performance of standard literature. One lesson. Three hours practice. One hour credit.

**MUA 1572, 1582, 2572, 2582 — Piano for Music Education Majors I, II, III, IV.**

Piano instruction for piano majors, with piano with a performance emphasis. Introduction to technique, literature, and performance of standard literature. One hour private instruction. Six hours practice. Two hours credit.

**MUA 1711, 1721 — Class Voice I, II.**

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. One lesson. Three hours practice. One hour credit.

**MUA 1741, 1751, 2741, 2751 — Voice for Non-Majors I, II, III, IV.**

Voice for non-major/music education majors is designed to teach the fundamental principles of singing, explore moderate levels of vocal literature and develop and improve the student's vocal ability. One lesson. Three hours practice. One hour credit.

**MUA 1772, 1782, 2772, 2782 — Voice for Music Education Majors I, II, III, IV.**

Voice for majors is designed to teach the fundamentals principles of singing, explore varied vocal repertoire, and develop and improve the student's vocal ability. One hour private instruction. Six hours practice. Two hours credit.

**MUA 1841, 1851, 2841, 2851 — Woodwinds for Non-Majors I, II, III, IV.**

Woodwind instruction for non-woodwind/music education majors. Designed to teach the fundamental principles of playing, explore moderate levels of literature, and develop the students interest in playing. One hour private instruction. Three hours practice. One hour credit.

**MUA 1872, 1882, 2872, 2882 — Woodwinds for Music Education Majors I, II, III, IV.**

Woodwind instruction for music education majors with an emphasis on woodwind instrumental playing. Designed to teach the fundamental principles of playing, exploring moderate to advanced levels of literature, develop the student's interest in playing, and strengthen the student's ability. One hour private instruction. Six hours practice. Two hours credit.

## **MUSIC ORGANIZATIONS**

### **(Band, Small Band Groups, Jazz Band, Choir, Handbells, Small Singing Groups)**

**MUO 1111, 1121, 2111, 2121 — Band I, II, III, IV.**

Performance and rehearsal instruction for music majors. Designed to teach the fundamental principles of playing, explore varied levels of literature and develop the student's knowledge of performance techniques. Four practice sessions. One hour credit.

**MUO 1141, 1151, 2141, 2151 — Small Band Groups I, II, III, IV.**

Performance and rehearsal instruction for music majors. Designed to teach the fundamental principles of playing, explore varied levels of literature and develop the student's knowledge of performance techniques in small ensembles. Two practice sessions. One hour credit.

**MUO 1171, 1181, 2171, 2181 — Jazz Band I, II, III, IV.**

A course designed for members selected from marching band members by audition to perform instrumental music from a variety of style periods. Emphasis on jazz. Two practice session. One hour credit.

**MUO 121(1-2), 122(1-2), 221(1-2), 222(1-2) — Choir I, II, III, IV.**

A course for music majors and non-majors focused on performing choral music from a variety of style periods. Three or five hours practice. One or two hours credit.

**MUO 1241, 1251, 2241, 2251 — Small Singing Groups I, II, III, IV.**

A course for select singers focused on performing music from one or more genres of music. One practice session. One hour credit.

## MUSIC FOUNDATIONS

### **MUS 1113 — Music Appreciation.**

Listening course designed to give the student, through aural perception, understanding and appreciation of music as a moving force in Western Culture. Three lectures. Three hours credit.

### **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. Three lectures. Three hours credit.

### **MUS 1133 — Fundamentals of Music.**

Provides the student with basic knowledge of notations, scales, keys, rhythm, intervals, triads, and their inversions. Three lectures. Three hours credit.

**MUS 1214, 1224, 2214, 2224 — Music Theory I, II, III, IV (Prerequisite: Minimum score of 35 on Music Theory Placement Test is recommended for MUS 1214. Minimum grade of “C” in each class to progress to the next level). Music Theory sequence must progress simultaneously with Piano I, II, III, & IV as well as with the applied lesson.**

Study of functional harmony through analysis and part writing, sight singing, ear training, and dictation. Three lectures. Two hours laboratory. Four hours credit.

### **MUS 1911, 1921, 2911, 2921 — Recital Class I, II, III, IV.**

Required performance of solo and ensemble literature by students majoring in music. Attendance at a prescribed minimum number of departmentally approved musical performances per semester also required. One hour credit.

### **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 lectures. Three hours credit.

## **NURSING, ADN** **(Grenada & Ridgeland)**

### **NUR 1115 — Nursing Theory I (Prerequisites: BIO 1514/1524 or BIO 2514/2524. Co-requisite: NUR 1311).**

Foundation for all subsequent nursing courses. Introduces the philosophy and conceptual framework of the Holmes Community College Associate Degree Nursing Program. Emphasis is placed on normal, basic needs with a clinical case study to apply the nursing process. Calculation of dosages and solutions is included. Correlates with NUR 1119. Five lectures. Five hours credit.

### **NUR 1119 — Nursing I.** **(Prerequisites: BIO 2514 & BIO 2524).**

Foundation for all subsequent nursing courses. Introduction to nursing and to the philosophy and conceptual framework of the Holmes Community College Associate Degree Nursing Program. Emphasis is placed on normal, basic human needs. Fundamental nursing skills are taught and practiced in the learning laboratory and applied in clinical settings. Introduction to pharmacology and to the calculation of dosages and solutions is included. Five lectures. Twelve hours laboratory. Nine hours credit.

### **NUR 1211, 1221, 2211, 2221 — Health Issues I, II, III, IV.**

This course will provide the student an opportunity for in-depth study of current health issues and the impact they have on health care delivery as a whole and the person as an individual. Through use of available resources to include the internet the student will explore such entities as treatment options, health care funding, alternative therapies, etc. One lecture. One hour credit.

### **NUR 1226 — Nursing II Theory (Prerequisite: NUR 1115/1119, ENG 1113, PSY 1513, BIO 1613 or FCS 1253. Pre/Co-requisite of SPT 1113, EPY 2533 and a Humanities or Fine Arts Elective).**

This course focuses on the utilization of the nursing process in the care of the individual and/or family in institutional and community health settings. Includes content on intravenous therapy and blood administration. Correlates with NUR 1229. Six lectures. Six hours credit.

**NUR 1229 — Nursing II. (Prerequisites: NUR 1119, ENG 1113, PSY 1513, BIO 1613 or FCS 1253. Pre/Co-requisite of SPT 1113, EPY 2533 and a Humanities or Fine Arts Elective).)**

This course focuses on the utilization of the nursing process in the care of the individual and/or family in institutional and community health settings. Students are expected to provide care to pediatric, obstetric, and geriatric patients. Six lectures. Nine hours laboratory. Nine hours credit.

**NUR 1311—Nursing Transition Laboratory (Co-requisite: NUR 1315 or 1115).**

A laboratory course designed to assist the LPN in synthesizing information in the areas of physical assessment, nursing process, intravenous administration and drug calculations. Three laboratory hours. One hour credit.

**NUR 1315 — Nursing Transition I (Co-requisite NUR 1311).**

A transitional course designed to assist the LPN in mastering the first semester of the first year ADN objectives and serves as a partial basis for entry into the sophomore nursing courses. It includes content on the registered nurse role and functions that was not a part of the students's LPN education. Five lectures. Five hours credit.

**NUR 1326 - Nursing Transition II (Prerequisite: NUR 1315 & 1311).**

A transitional course designed to assist the LPN in mastering the second semester of the first year ADN objectives and serves as partial basis for entry into the sophomore courses. It includes content related to the registered nurse role and functions that are not covered in NUR 1315. Six lectures. Six hours credit.

**NUR 1413 - Nursing Externship (Prerequisite: NUR 1229).**

This nursing elective course provides the learner with additional opportunity to practice learned skills repetitively, enhance interpersonal skills, and develop organizational skills. The student receives guidance, supervision, and evaluation from a registered nurse preceptor in conjunction with nursing faculty. 270 contact hours per semester. Three credit hours.

**NUR 1513 — End of Life Issues.**

The purpose of this course is to emphasize the availability of specific knowledge on end-of-life care. The intent is to provide information that will improve the student's understanding of end-of-life care. Topics of discussion include information on advance directives, goals of care, family issues, community resources, management of pain and other symptoms, medical futility, the last hours of living, legal and financial issues, and cultural, social, psychological, and spiritual concerns in end-of-life care. Three lectures. Three hours credit.

**NUR 2119 — Nursing III (Prerequisites: NUR 1119 & NUR 1229, or NUR 1115, 1311, & 1226, or NUR 1315, 1311, & 1326).**

The first of two courses which focus on the utilization of the nursing process in the care of adults and children who have threats to basic needs. Care of the pre- and postoperative patient is explored. Concepts introduced in Nursing 1119 are reinforced and applied. Selected mental health concepts are integrated. Six lectures. Nine hours laboratory. Nine hours credit.

**NUR 2123 — Pharmacology (Prerequisite: NUR 1229, 1326, or 1226; Co-requisite: NUR 2119).**

This course is designed to enhance the student's understanding and application of pharmacological principles. Commonly used drugs will be studied and classified according to action and therapeutic use. Emphasis will be placed on the nursing process with patient teaching. Three lectures. Three hours credit.

**NUR 2239 — Nursing IV (Prerequisite: NUR 2119 & 2123; Co-requisite: NUR 2243).**

The second of two courses which focus on the utilization of the nursing process in the care of the adult and child patient. This course builds on Nursing 2119. Nursing care on a more advanced level is utilized. Nursing care of the critically ill patient is emphasized. The student gains experience with leadership and management skills. Five lectures. Twelve hours laboratory. Nine hours credit.

**NUR 2243 — Management of Nursing Care (Prerequisite: NUR 2119 & 2123; Co-requisite: NUR 2239).**

This course is designed to introduce basic principles of organization and management that will assist the student in functioning as an associate degree nurse. The basic elements of leadership and delegation will be incorporated as it relates to coordinating the care of a group of patients. Three lectures. Three hours.

**NUR 2513 — Principles of Alternative & Complementary Therapies.**

This course provides an overview of the most common complementary and alternative medicine (CAM) modalities/therapies used in the USA. Each topic will cover one modality/therapy (homeopathy, acupuncture, naturopathy, chiropractic, therapeutic touch, music therapy, folk remedies, energy healing, etc.) at a time. Topics may be chosen based on students' interests and needs. Three lectures. Three hours credit.

## PHILOSOPHY AND BIBLE

### **PHI 1113 — Old Testament Survey.**

The student will survey the Hebrew Bible (Old Testament) with regard to its worth as a literary work, along with significant dates, themes, concepts and contributions of its characters to that history and literature. Three lectures. Three hours credit.

### **PHI 1133 — New Testament Survey.**

A study of the New Testament covering the life of Jesus of Nazareth and the establishment of the early church as presented in the Gospels, Acts, and other New Testament books. Three lectures. Three hours credit.

### **PHI 1153 — Jesus and the Gospels.**

This course is a study of the life and ministry of Jesus of Nazareth as recorded in the four canonical gospels with specific consideration of the geographical, political, and social conditions of the 1<sup>st</sup> century and recognition of various early interpretations of the meaning of the life and person of Jesus. Three lectures. Three hours credit.

### **PHI 2113 — Introduction to Philosophy I.**

An introduction to the major themes and history of the discipline of Philosophy with an emphasis on the development of critical thinking skills. Three lectures. Three hours credit.

### **PHI 2143 — Ethics.**

An introduction to classical moral philosophy with the investigation of some selected moral problems. Three lectures. Three hours credit.

### **PHI 2613 – World Religions I.**

Examination of the beliefs and development of Buddhism, Christianity, Hinduism, Islam, Judaism, and other religious traditions. Three lectures. Three hours credit.

### **PHI 2713 –Logic.**

An introduction to the discipline of logic including formal and informal logic, as well as the development of critical thinking skills. Three lectures. Three hours credit.

## PHYSICS

### **PHY 1114 — Astronomy.**

A combined lecture and laboratory course that includes surveys of the solar system, our galaxy, and the universe. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

### **PHY 2244 — Physical Science Survey I**

**(Corequisite: MAT 1233 or placement score for MAT 1313 or higher).**

A combined lecture and laboratory course that includes studies of measurements and units, electricity, mechanics, heat, sound, light, and astronomy. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

### **PHY 2254 — Physical Science Survey II**

**(Corequisite: MAT 1233 or placement score for MAT 1313 or higher).**

A combined lecture and laboratory course that includes studies of chemistry, geology and meteorology. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Two hours laboratory. Four hours credit.

### **PHY 2414 — General Physics I (Corequisite: MAT 1323 or placement score for MAT 1613 or higher).**

A combined lecture and laboratory course covering mechanics, heat, waves, and sound. This is a non-calculus based course primarily for pre-professional majors. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Three hours laboratory. Four hours credit.

### **PHY 2424 — General Physics II (Prerequisite: PHY 2414).**

A combined lecture and laboratory course covering electricity, magnetism, optics, and modern physics. This is a non-calculus based course primarily for pre-professional majors. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Three hours laboratory. Four hours credit.

### **PHY 2514 — General Physics I-A (Prerequisite: MAT 1613 or higher).**

A combined lecture and laboratory course covering mechanics, heat, waves, and sound. This is a calculus-based course primarily for students of engineering, science, or mathematics. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Three hours laboratory. Four hours credit.

### **PHY 2524 — General Physics II-A (Prerequisite: PHY 2514).**

A combined lecture and laboratory course covering electricity, magnetism, optics, and modern physics. This is a calculus-based course primarily for students of engineering, science, or mathematics. Labs associated with this course contain experiments and exercises that reinforce the principles introduced in lecture classes. Three lectures. Three hours laboratory. Four hours credit.

## POLITICAL SCIENCE

### **PSC 1113 — American National Government.**

Survey of the organizations, political aspects, and basis of national government. Three lectures. Three hours credit.

### **PSC 1123 — American State & Local Government (Prerequisite: PSC 1113).**

The relationship among states, national and local governments. The organization, function, and operation of the three branches with emphasis on the state of Mississippi. Three lectures. Three hours credit.

### **PSC 2113 — Comparative Government.**

A survey of various international governmental systems. Three lectures. Three hours credit.

## PSYCHOLOGY

### **PSY 1513 — General Psychology I.**

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 lectures. Three hours credit.

## READING

### **REA 0113 — Comprehension I.**

Special reading instruction for students deficient in basic reading skills. Stresses functional word attack skills, comprehension, vocabulary, and basic study skills. Supplemental work using computers is required. Three lectures. Three hours instructional credit. (Not designed to transfer).

### **REA 0123 — Comprehension II (Prerequisite: REA 0113 with C or appropriate placement score).**

A continuation of REA 0113. Three lectures. Three hours institutional credit. (Not designed to transfer).

### **REA 1233 — Speed Reading I.**

A course designed to improve a student's reading rate with emphasis on comprehension and vocabulary skills. Guidance in developing wide reading interests that will provide background for college courses. Three lectures. Three hours credit.

## SOCIOLOGY

### **SOC 2113 — Introduction to Sociology.**

This course introduces the scientific study of human society and social interaction. Social influences on individuals and groups are examined. Three lectures. Three hours credit.

### **SOC 2133 — Social Problems.**

A study of the nature, scope, and effects of major social problems of today and the theoretical preventive measures to alleviate them. Three lectures. Three hours credit.

### **SOC 2143 — Marriage and Family.**

A study of the family as a cultural unit, the institution of marriage, the problems of parenthood and of social-economic adjustments to society. Three lectures. Three hours credit.

### **SOC 2213 — Introduction to Anthropology.**

A survey of major fields and basic principles in the comparative study of mankind. Three lectures. Three hours credit.

## SOCIAL WORK

### **SWK 1113 - Social Work: A Helping Profession.**

The course exposes students to a “helping” profession that plays a central role in addressing human needs. Students are exposed to personal/lived experiences of social work clients and successes of “real” social workers in respective practices such as mental health, child welfare, disaster, corrections, faith-based, military, international relief, and industry. Three lectures. Three hours credit.

## SPEECH AND THEATER

### **SPT 1113 — Public Speaking (Corequisite: ENG 1113 or appropriate placement score for ENG 1113).**

Study and practice in making speeches for a variety of public forums. Major emphasis is placed on speech preparation and delivery. Three lectures. Three hours credit.

### **SPT 1213 — Fundamentals of Theatre Production (Co-requisite: SPT 1241, 1251, 2241, or 2251).**

A basic course in management of theatre arts to provide the student with the general knowledge of the collaborative process of mounting and marketing a theatrical production. Concurrent enrollment in Drama Production is required. Three lectures. Three hours credit.

**SPT 1233 — Acting.**

An introduction to the training of the voice, body, and imagination as the foundations of the work of an actor through the study of acting theory, vocabulary, theatrical games, mime, monologue, and scene work. Three lectures. Three hours credit.

**SPT 1241, 1251, 2241, 2251 — Drama Production I, II, III, IV.**

Participation in college drama productions. One hour credit.

**SPT 2223 — Stagecraft (Co-requisite: SPT 1241, 1251, 2241, or 2251).**

An introduction to all technical elements of production design and operation. Concurrent enrollment in Drama Production is required. Three lectures. Three hours credit.

**SPT 2233 — Theatre Appreciation.**

An introduction of the cultural, historical, and social aspects of drama. Class content provides an appreciation of theatre and performance art to develop audience standards through demonstration of the unique characteristic of theatre. Fine arts elective. Three lectures. Three hours credit.

## TECHNICAL COURSE DESCRIPTIONS

### AUTOMOTIVE TECHNOLOGY

**ATT 1124 — Basic Electrical/Electronic Systems**

This is a course designed to provide advanced skills and knowledge related to all components of the vehicle electrical system including lights, battery, and charging components. Two lecture. Four hours laboratory. Four hours credit.

**ATT 1134 — Advanced Electrical/Electronic Systems**

This is a course designed to provide advanced skills and knowledge related to all components of the vehicle electrical system including gauges, driver information systems, horn, wiper/wiper systems, and accessories. Two lectures. Four hours laboratory. Four hours credit.

**ATT 1213 — Brakes.**

A course to provide advanced skills and knowledge related to the repair and maintenance of brake systems on automobiles. Includes instruction and practice in diagnosis of braking systems problems and the repair of brake systems. Two lectures. Two hours laboratory. Three hours credit.

**ATT 1314 — Manual Drive Trains/Transaxles.**

A course to provide advanced skills and knowledge related to the maintenance and repair of manual transmissions, transaxles and drive train components. Includes instruction in the diagnosis of drive train problems and the repair and maintenance of transmissions, transaxles, clutches, CV joints, differentials and other components. Two lectures. Four hours laboratory. Four hours credit.

**ATT 1424 — Basic Engine Performance I.**

A course to provide advanced skills and knowledge related to the maintenance and adjustment of gasoline engines for optimum performance. Includes instruction and practice in the diagnosis and correction of problems associated with poor performance. Two lectures. Four hours laboratory. Four hours credit.

**ATT 1715 — Engine Repair.**

A course to provide advanced skills and knowledge related to the repair and rebuilding of automotive-type engines. Includes instruction and practice in the diagnosis and repair of engine components including valve trains, blocks, pistons and connecting rods, crankshafts, and oil pumps. Two lectures. Six hours laboratory. Five hours credit.

**ATT 1811 — Introduction, Safety, and Employability Skills.**

This is a course designed to provide knowledge of classroom and lab policies and procedures. Safety practices and procedures associated with the automotive program and automotive industry. One lecture. One hour credit.

**ATT 2325 — Automatic Transmissions/Transaxles.**

This is a course designed to provide skills and knowledge related to the diagnosis of automatic transmissions and transaxles. Includes instruction and practice of testing, inspecting, and repair of these devices. Two lectures. Six hours laboratory. Five hours credit.

**ATT 2334 — Steering and Suspension Systems.**

A course to provide advanced skills and knowledge related to the inspection and repair of steering and suspension systems on automobiles. Includes instruction and practice in the diagnosis of steering system problems and the repair/replacement of steering systems components. Two lectures. Four hours laboratory. Four hours credit.

**ATT 2434 — Engine Performance II.**

This is a course designed to provide advanced skills and knowledge related to the ignition system, fuel, air induction, and exhaust systems. It includes instruction, diagnosis, and correction of problems associated within these areas. Two lectures. Four hours laboratory. Four hours credit.

**ATT 2444 — Engine Performance III**

This is a course designed to provide advanced skills and knowledge related to the emissions control systems and engine related service. It includes instruction, diagnosis, and correction of problems associated within these areas. Two lectures. Four hours laboratory. Four hours credit.

**ATT 2614 — Heating and Air Conditioning.**

A course to provide advanced skills and knowledge associated with the maintenance and repair of automotive heating and air conditioning systems. Includes instruction and practice in the diagnosis and repair of air conditioning system components, heater lines and cores, and control systems. Two lectures. Four hours laboratory. Four hours credit.

**ATT 291(1-3) — Special Problems in Automotive Mechanics Tech.**

A course to provide students with an opportunity to utilize skills and knowledge gained in other Automotive Technology courses. The instructor and student work closely together to select and establish criteria for completion of the project. One to three scheduled hours. Two to six hours laboratory. One to three hours credit.

**ATT 292(1-6) — Supervised Work Experience in Automotive Mechanics Tech.**

This internship course provides actual work experience in an automotive mechanics business under the direction of the employer and the instructor. One to six scheduled hours. Three to eighteen hours externship. One to six hours credit.

**BANKING AND FINANCE TECHNOLOGY****TBF 1123 — Money and Banking.**

Practical aspects of money and banking and the basic monetary theory. A brief historical perspective is utilized. Emphasis on such problems as economic stabilization, types of spending, theory of gold, limitations of central bank control, government fiscal policy, balance of payments, and foreign exchange, showing their repercussions on the banking industry in affecting yield curves and the structuring of portfolios. Three lectures. Three hours credit.

## BUSINESS ADMINISTRATION TECHNOLOGY

### **TBA 1113 — Principles of Banking.**

A comprehensive introduction to modern banking, this course touches on almost all aspects of bank functions. Primary topics include the following: the language and documents of banking; check processing; teller functions; deposit function; trust services; bank bookkeeping; and bank loans and investments. Three lectures. Three hours credit.

### **TBA 2413 — Business Law I.**

This course is designed to acquaint the students with the fundamental principles of law as they relate to the basic legal problems of business transactions in our economy. Special attention will be given to an introduction to law; law of contracts; agencies and employment; negotiable instruments and commercial papers. Three lectures. Three hours credit.

## BUSINESS & OFFICE TECHNOLOGY COMPUTER INFORMATION SYSTEMS

### **BOT 1013 — Introduction to Keyboarding.**

This course provides an introduction to basic word processing commands and essential skill development using the touch system on the alphabetic keyboard. Course emphasis will be on speed and accuracy when keying documents and timed writings. Three lectures. Three hours credit.

**BOT 1113 — Document Formatting & Production (Prerequisite: Prior to enrollment in this course, students will be required to key straight-copy material at a minimum of 35 GWPM on a 5-minute time writing, with a maximum of 1 error per minute OR successfully complete BOT 1013).**

This course focuses on improving keyboarding techniques using the touch method and on production of documents using word processing functions. Two lectures. Two hours laboratory. Three hours credit.

**BOT 1123 — Keyboard Skillbuilding (Prerequisite: BOT 1113).**

This course further develops keyboard techniques emphasizing speed and accuracy. Two lectures. Two hours laboratory. Three hours credit.

**BOT 1133 — Microcomputer Applications.**

This course will introduce an operating system and word processing, spreadsheet, database management, and presentation software applications. Two lectures. Two hours laboratory. Three hours credit.

**BOT 1143 — Word Processing (Prerequisites: BOT 1133 & BOT 1113).**

This course focuses on production of documents using word processing functions. Production with accuracy is stressed and practice is given through a variety of documents for skill building. Two lectures. Two hours laboratory. Three hours credit.

**BOT 1213 — Professional Development.**

This course emphasizes an awareness of interpersonal skills essential for job success. Three lectures. Three hours credit.

**BOT 1313 — Applied Business Math (Prerequisite: MAT 0113 or higher or appropriate placement score for MAT 0123 or higher).**

This course is designed to develop competency in mathematics for business use with emphasis on the touch method. Three lectures. Three hours credit.

**BOT 1413 — Records Management.**

This course focuses on the systems approach to managing recorded information in any form. Emphasis is placed on the three categories into which records generally fall and the treatment of these categories in proper management, storage, and retrieval. Three lectures. Three hours credit.

**BOT 1433 — Business Accounting.**

This course is designed to develop an understanding of analyzing, recording, classifying, and summarizing financial information of a sole proprietorship with insight into interpreting and reporting the resulting effects upon the business. Three lectures. Three hours credit.

**BOT 1443 — Advanced Business Accounting (Prerequisite: BOT 1433 or ACC 1213).**

This course is a continuation of Business Accounting with emphasis in accounting for corporations. Three lectures. Three hours credit.

**BOT 1513 — Machine Transcription (Prerequisites: BOT 1143).**

This course is designed to teach transcription of a wide variety of business communications from machine dictation. Two lectures. Two hours laboratory. Three hours credit.

**BOT 1613 — Medical Office Terminology I.**

This course is a study of medical language relating to the various body systems including diseases, physical conditions, procedures, clinical specialties, and abbreviations. Emphasis is placed on correct spelling and pronunciation. Three lectures. Three hours credit.

**BOT 1623 — Medical Office Terminology II (Prerequisite: BOT 1613).**

This course presents medical terminology pertaining to human anatomy in the context of body systems. The emphasis is directed toward medical terminology as it relates to the medical office. Three lectures. Three hours credit.

**BOT 1713 — Mechanics of Communication (Prerequisite: ENG 0113 or higher or appropriate placement score for ENG 0123 or higher).**

This course is designed to review the basic English competencies necessary for success in the business world. A study of the parts of speech, sentence structure, sentence types, capitalization, punctuation, and spelling is emphasized. Three lectures. Three hours credit.

**BOT 1813 — Electronic Spreadsheet (Prerequisites: BOT 1313 & BOT 1133).**

This course focuses on applications of the electronic spreadsheet as an aid to management decision making. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2133 — Desktop Publishing (Prerequisite: BOT 1143).**

This course presents graphic design techniques, principles of page layout and design, and electronic publishing terminology and applications to create a variety of documents such as flyers, brochures, newsletters, and business cards using advanced features of word processing software. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2323 — Database Management (Prerequisite: BOT 1133).**

This course applies database concepts for designing and manipulating data files and formatting output as complex documents and reports. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2413 — Computerized Accounting (Prerequisites: BOT 1433 or ACC 1213).**

This course applies basic accounting principles using a computerized accounting system. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2423 — Income Tax Accounting (Prerequisite: BOT 1433 or ACC 1213).**

This course provides an in-depth study of payroll accounting. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2463 — Payroll Accounting (Prerequisite: BOT 1433 or ACC 1213).**

This course provides an in-depth study of payroll accounting. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2523 — Medical Machine Transcription I (Prerequisites: BOT 1113, BOT 1613, & BOT 1623).**

This course is designed to teach transcription of various medical documents. One lecture. Four hours laboratory. Three hours credit.

**BOT 2533 — Medical Machine Transcription II (Prerequisite: BOT 2523).**

This course is designed to continue teaching transcription of various medical documents including dictation given by doctors with foreign accents and additional medical specialties. One lecture. Four hours laboratory. Three hours credit.

**BOT 2643 — CPT Coding (Prerequisites: BOT 1613 & BOT 1623).**

This course is an introduction to the field of procedural coding and requirements for insurance reimbursement. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2653 — ICD Coding (Prerequisites: BOT 1613 & BOT 1623).**

This course is an introduction to the field of diagnostic coding. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2663 — Advanced Medical Coding (Prerequisites: BOT 2643 & BOT 2653).**

This course is designed to teach the advanced analysis of diagnostic and procedural coding systems. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2673 — Medical Insurance Billing (Prerequisites: BOT 2643 & BOT 2653).**

This course is a culmination of skills and knowledge of appropriate procedures for generating, processing, and submitting health insurance claims to private and governmental health insurance programs. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2723 — Administrative Office Procedures (Prerequisite: BOT 1143).**

This course will provide comprehensive coverage and integration of business skills and issues, develop critical-thinking and problem-solving skills, and establish a foundation in business procedures. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2743 — Medical Office Concepts (Prerequisite: BOT 1113).**

This course will provide coverage and integration of medical office skills and issues. Problem solving will be emphasized. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2753 — Medical Information Management (Prerequisites: BOT 2743).**

This course will continue coverage of medical office issues with emphasis on health insurance filing. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2813 — Business Communication (Prerequisites: BOT 1713 & BOT 1113 or ENG 1113 & CPT 1323).**

This course develops communication skills with emphasis on principles of writing business correspondence and reports, and preparing presentations using electronic media. Three lectures. Three hours credit.

**BOT 2823—Communication Technology (Prerequisite: BOT 1133).**

This course will present an overview of the resources available for on-line communication using current technology. Two lectures. Two hours laboratory. Three hours credit.

**BOT 2833—Integrated Computer Applications. (Prerequisites: BOT 1133).**

This course integrates activities using applications software including word processing, database, spreadsheet, graphics and multimedia. Two lectures. Two hours laboratory. Three hours credit.

**CNT 1414— Fundamentals of Data Communications.**

This course presents basic concepts of telephony, local area networks, wide area networks, data transmission, and topology methods. Two lectures. Four hours laboratory. Four hours credit.

**CNT 1513 — Web Development Concepts**

This course is an introduction to the Internet and its uses in the world of business. It includes basic and advanced features of the Internet, World Wide Web, gophers, listservers, and creating web pages. Upon completion of this course, students will be able to create a personalized home page and post it on the Internet, download files using a browser and an FTP program, and e-mail messages. Two lectures. Two hours laboratory. Three hours credit.

**CNT 1524 — Network Components (Prerequisite: CNT 1414).**

This course presents local area network and wide area network connectivity. It focuses on architecture, topologies, protocols, and transport methods of a network. Two lectures. Four hours laboratory. Four hours credit.

**CNT 1624 — Network Administration Using Microsoft Windows Server**

This course focuses on the management of a computer network using the Microsoft Windows NT Server network operating system. Emphasis will be placed on daily administrative tasks performed by a network administrator. Two lectures. Four hours laboratory. Four hours credit.

**CNT 1634 — Microsoft Windows-Installing & Configuration.**

The main goal of this course is to provide students with a comprehensive overview of the features and functions of Microsoft Windows. This includes a look at the configuration, management, and networking functionality of Windows in stand-alone as well as both large and small network environments. Two lectures. Four hours laboratory. Four hours credit.

**CNT 1654 — Network Administration Using Linux.**

This course focuses on the management of a computer network using the Linux network operating system. Emphasis will be placed on daily administrative tasks performed by a network administrator. Two lectures. Four hours laboratory. Four hours credit.

**CNT 2344 – Introduction to MS/SQL (Prerequisite: CNT 1624 – Network Administration Using Microsoft Server).**

This course is designed to generate further experience for the student in installing and maintaining a MC SQL Server. This course also targets basic programming used by a Data Base Administrator. Two lectures. Four hours laboratory. Four hours credit.

**CNT 2423 — System Maintenance.**

This course covers the diagnosis, troubleshooting, and maintenance of computer components. Topics include hardware compatibility, system architecture, memory, input devices, video displays, disk drives, modems, and printers. Two lectures. Two hours laboratory. Three hours credit.

**CNT 2534 — Network Planning and Design (Prerequisite: CNT 1524).**

This course involves applying network concepts in planning and designing a functioning network. Emphasis is placed on recognizing the need for a network, conducting analysis, and designing solutions. Two lectures. Four hours laboratory. Four hours credit.

**CNT 2544 —Network Implementation (Prerequisite: CNT 2534).**

This course is the culmination of all concepts learned in the network curriculum. Topics include planning, installation, evaluation, and maintenance of a network solution. Two lectures. Four hours laboratory. Four hours credit.

**CNT 2553—Network Security.**

This course provides an introduction to network and computer security. Topics such as ethics, security policies, legal issues, vulnerability testing tools, firewalls and operating system hardening will be discussed. Students will receive a deeper understanding of network operations and protocols through traffic capture and protocol analysis. Two lectures. Two hours laboratory. Three hours credit.

**CNT 2644 — Advanced Network Administration Using Microsoft Windows Server (Prerequisites: CNT 1624 or 1634).**

This course is a continuation of Network Administration Using Microsoft Windows NT Server. Emphasis is placed on installation, configuration, and implementation of a functional NT Server. Two lectures. Four hours laboratory. Four hours credit.

**CPT 1123 — Computer Concepts.**

This course is an introduction to the history, terminology, and theory of computer systems. Students will gain hands-on experience in the operation of a mid-range computer. Two lectures. Two hours laboratory. Three hours credit.

**CPT 1144 — Programming Development Concepts.**

This course is an introduction to programming logic and computer systems. Students will gain hands-on experience in the development of computer programs. Three lectures. Two hours laboratory. Four hours credit.

**CPT 1214 — Visual BASIC Programming Language.**

Introduction to BASIC programming language to include sort, controlled loops, multidimensional arrays and modular programming. Two lectures. Four hours laboratory. Four hours credit.

**CPT 1224 — RPG Programming Language.**

This course is designed to introduce the student to the RPG language and to use the computer in business applications. Two lectures. Four hours laboratory. Four hours credit.

**CPT 1234 — COBOL Programming Language.**

This course is designed to introduce the student to the use of the COBOL language in business applications to include arithmetic operations, report editing, control break processing, and table processing techniques. Two lectures. Four hours laboratory. Four hours credit.

**CPT 1313 — Computer Operations.**

A study of the operation of computers and peripherals including operations control language, utilities, control commands, and procedures. Two lectures. Two hours laboratory. Three hours credit.

**CPT 1323— Survey of Microcomputer Applications.**

This course will introduce word processing, spreadsheet, and database management software with integration of these applications. Two lectures. Two hours laboratory. Three hours credit.

**CPT 1333 — Operating Platforms.**

This course will provide experience in a variety of operating platforms. Emphasis will be placed on support personnel interaction with the platform to assist users in business environments. Two lectures. Two hours laboratory. Three hours credit.

**CPT 1353 — Database Design Fundamentals.**

This course is a study of the design of databases. Additional emphasis is placed on creation, manipulation, extraction, and display of data from existing databases. Two lectures. Two hours laboratory. Three hours credit.

**CPT 1414 — Java Programming Language.**

Introduction to the Java programming language to include sort, loops, arrays, and Applets. Two lectures. Four hours laboratory. Four hours credit.

**CPT 1513 — Web Development Concepts.**

This course is an introduction to the Internet and its uses in the world of business. It includes basic and advanced features of the Internet, world Wide Web, browsers, listservers, and creating web pages. Upon completion of this course, students will be able to create a personalized home page and post it on the Internet, download files using a browser and an FTP program, and send e-mail messages. Two lectures. Two hours laboratory. Three hours credit.

**CPT 2133 - Career Development.**

This course provides practical exercises in interpersonal skills, the job search process, and the importance of high standards of personal and professional relationships for employment. Two lectures. Two hours lab. Three hours credit.

**CPT 2244 — Database Programming (Prerequisite: CPT 2434).**

This course will introduce programming using a database management software application. Emphasis will be placed on menus and file maintenance. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2264 — Advanced RPG Programming Language  
(Prerequisite: CPT 1224).**

This course is a continuation of the RPG programming language. Emphasis is placed on advanced table processing, file maintenance, and interactive programming. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2274 — Advanced COBOL Programming Language  
(Prerequisite: CPT 1234).**

This course is a continuation in the study of COBOL. Emphasis is placed on advanced table processing, file maintenance, and interactive programming. Two hours lecture. Four hours lab. Four hours credit.

**CPT 2284 — C++ Programming Language.**

This course is designed to introduce the student to the C++ Programming Language and its basic functions. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2354 — Systems Analysis and Design.**

This course introduces techniques used in systems analysis and design. Emphasis will be placed on the design, development, and implementation of an information system. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2364 – Team Project Management. (Prerequisites: CPT 1214& CNT 1414).**

This course is designed to generate further experience for the student in working in a team environment. This course targets team based network design and team based program design. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2373 — Network Fundamentals.**

This course focuses on the fundamentals of computer networking. Two lectures. Two hours laboratory. Three hours credit.

**CPT 2424 - Advanced C Programming (Prerequisites: CPT 2284).**

This course is a continuation of the C Programming course. Students will learn more in-depth Object - Oriented Programming including inheritance and exception handling. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2434 — Advanced Visual BASIC Programming Language (Prerequisite: CPT 1214).**

This course is a continuation of the BASIC Programming Language. Emphasis is placed on the database access, files access, controls, and structures. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2444—Script Programming.**

This course is an introduction to the use of integrating scripts to add functionality to web pages. Two lectures. Four hours laboratory. Four hours credit.

**CPT 2454 – Game Programming Using Flash and Action Script (Prerequisites: CPT 2434 or approved equivalent advanced object-oriented programming language).**

This course is designed to further introduce the student to creating interactive applications, through the format of a game. This course will help the student become more adept at creating functional user interfaces and help them deal with program paths based on user input. Two lectures. Four hours laboratory. Four hours credit.

### **CPT 2911-2916 — Work-Based Learning in Computer Information Systems.**

Direct application of concepts, terminology, and theory of computer information systems technology. Students must be employed in a work environment where they will have to solve problems as encountered in industry. (Credit is awarded at the rate of 1 hour credit per 3 hours externship.) One - six hours credit.

### **DBT 1113 - SQL Programming (Prerequisite: DBT1214).**

This course offers students an extensive introduction to data server technology, covering the concepts of both relational and object relational databases and the Standard Query Language (SQL). Students are taught to store, retrieve, and manipulate data. Two lectures. Three hours laboratory. Three hours credit.

### **DBT 1123 - PL/SQL Programming (Prerequisite: DBT1113).**

This course offers students an extensive introduction to data server technology, covering advanced concepts of both relational and object-relational databases using PL/SQL. Students are taught to create and maintain database objects and control user access. Two lectures. Three hours lab. Three hours credit.

### **DBT 1214 – Database Architecture and Administration.**

This course is designed to give students a firm foundation in basic database tasks enabling them to design, create, and maintain a database. Students will gain a conceptual understanding of database architecture and how its components work and interact with one another. Students will also learn to create an operational database and properly manage the various structures. Two lectures. Three hours laboratory. Four hours credit.

## **CHILD DEVELOPMENT TECHNOLOGY**

### **CDT 1713—Language & Literacy Development for Young Children.**

A study of language development and the implementation of a developmentally appropriate language arts curriculum for young children. Three lectures. Three hours credit.

## **COLLISION REPAIR TECHNOLOGY**

### **ABT 1143 — Structural Analysis & Damage Repair I.**

A course to provide skills and practice in welding and cutting procedures that are used in the collision repair industry. This course also covers the complete inspection and non-structural analysis of damaged vehicles. It is designed to enable the student to determine the conditions and severity of the damage, the repair or replacement of parts, the estimated repair time, and correct use of reference manuals. Two lectures. Two hours laboratory. Three hours credit.

### **ABT 1153 — Structural Analysis & Damage Repair II.**

This course is a continuation of Structural Analysis and Damage Repair I. This course provides instruction and practice in the removal and reinstallation of glass. Two lectures. Two hours laboratory. Three hours credit.

### **ABT 1223 — Non-Structural Analysis & Damage Repair I.**

A course in the procedures and practices for metal finishing and body filling. This course also covers the complete inspection and non-structural analysis of damaged vehicles. It is designed to enable the student to determine the conditions and severity of the damage, the repair or replacement of parts, the estimated repair time, and correct use of reference manuals. Two lectures. Two hours laboratory. Three hours credit.

### **ABT 1233—Non-Structural Analysis & Damage Repair II.**

This course is a continuation of Non-Structural Analysis and Damage Repair I. This course provides instruction for preparation principles and practices. One lecture. Four hours laboratory. Three hours credit.

### **ABT 1314 — Refinishing I.**

A course to provide skills and practices in vehicle preparation, cleaning, sanding, metal treatment, and masking. Included is determining imperfections in paint jobs. Emphasis is placed upon personal safety and environmental concerns. Two lectures. Four hours laboratory. Four hours credit.

### **ABT 1323 — Refinishing II.**

A continuation of Refinishing I. Included are types of paint defects, paint gun application, and maintenance procedures. One lecture. Four hours laboratory. Three hours credit.

### **ABT 1443—Mechanical & Electrical Components I.**

A course designed to provide theory and practice in the areas of restraint systems, cooling systems, and air conditioning/heating systems. An introduction to small business management techniques as applied to the collision repair shop. Includes computerized information and record systems. Also included are financial responsibilities, shop layout, inventory, and employee-employer relations. Three lectures. Three hours credit.

**ABT 1453—Mechanical & Electrical Components II.**

A course designed to provide theory and practice in the areas of brakes and electrical. Three lectures. Three hours credit.

**ABT 2163—Structural Analysis & Damage Repair III.**

This course is a continuation of Structural Analysis and Damage Repair II. This course provides instruction and practice in unibody inspection, measurement, and repair. Two lectures. Two hours laboratory. Three hours credit.

**ABT 2173—Structural Analysis & Damage Repair IV.**

This course is a continuation of Structural Analysis and Damage Repair III. This course provides the procedures and practices for frame inspection and repair. Two lectures. Two hours laboratory. Three hours credit.

**ABT 2243—Non-Structural Analysis & Damage Repair III.**

This course is a continuation of Non-Structural Analysis and Damage Repair II. This course provides instruction for outer body panel repair, replacement, and adjustment principles and practices. Two lectures. Two hours laboratory. Three hours credit.

**ABT 2253—Non-Structural Analysis & Damage Repair IV.**

This course is a continuation of Non-Structural Analysis and Damage Repair III. This course provides instruction and practice for the following areas: moveable glass, hardware associated with glass, plastics and adhesive. Two lectures. Two hours laboratory. Three hours credit.

**ABT 2333 — Refinishing III.**

A continuation of Refinishing II with emphasis on advanced painting techniques; including paint mixing, matching, and applying. One lecture. Four hours laboratory. Three hours credit.

**ABT 2343—Refinishing IV.**

A continuation of Refinishing III with emphasis on advanced techniques of painting, including detailing. One lecture. Four hours laboratory. Three hours credit.

**ABT 291(1-3) — Special Problem in Collision Repair Technology (Prerequisite: Consent of Instructor).**

A course to provide students with an opportunity to utilize skills and knowledge gained in other Collision Repair Technology courses. The instructor and student work closely together to select a topic and establish criteria for completion of the project. One to three lectures. Two to six hours laboratory. One to three hours credit.

**ABT 292(1-6) — Supervised Work Experience in Collision Repair Technology (Prerequisite: Sophomore standing in Collision Repair Technology).**

A course which is a cooperative program between industry and education designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of one semester hour per 45 industrial contact hours. One to six hours credit.

## **ELECTRONICS TECHNOLOGY**

**EET 1114 — DC Circuits.**

This course is designed for students to know the principles and theories associated with DC circuits. This course includes the study of electrical circuits, laws and formulae, and the use of test equipment to analyze DC circuits. Two lectures. Four hours lab. Four hours credit.

**EET 1123 — AC Circuits.**

This course is designed to provide students with the principles and theories associated with AC circuits. This course includes the study of electrical circuits, laws and formulae, and the use of test equipment to analyze AC circuits. Two hours lecture. Two hours lab. Three hours credit.

**EET 1214 — Digital Electronics.**

A course designed to introduce the student to number systems, logic circuits, counters, registers, memory devices, combination logic circuits, boolean algebra, and a basic computer system. Three lectures. Two hours laboratory. Four hours credit.

**EET 1334 — Solid State Devices and Circuits (Prerequisite: EET 1114).**

A course designed to introduce the student to active devices which include PN junction diodes, bipolar transistor, bipolar transistor circuits, and unipolar devices with emphasis on low frequency application and troubleshooting. Two lectures. Four hours laboratory. Four hours credit.

**EET 1324 — Microprocessors (Prerequisite EET 1214).**

A course designed to provide students with skills and knowledge of microprocessor architecture, machine and assembly language timing, interfacing, and other hardware applications associated with microprocessor systems. Two lectures. Four hours laboratory. Four hours credit.

**EET 2334 — Linear Integrated Circuits (Prerequisite EET 1334).**

A course designed to provide the student with skills and knowledge associated with advanced semiconductor devices and linear integrated circuits. Emphasis is placed on linear integrated circuits used with operational amplifiers, active filters, voltage regulators, timers, and phase locked loops. Three lectures. Two hours laboratory. Four hours credit.

**EET 2414 — Electronic Communications (Prerequisite EET 1334).**

A course designed to provide the student with concepts and skills related to analog and digital communications. Topics covered include amplitude and frequency modulation, transmission, and reception, data transmission formats and codes, the RS-232 interface, and modulation-demodulation of digital communications. Two lectures. Four hours laboratory. Four hours credit.

**EET 291(1-3) — Special Project (Consent of Instructor).**

A course designed to provide the student with practical application of skills and knowledge gained in other electronics or electronics-related courses. The instructor works closely with the student to insure that the selection of a project will enhance the student's learning experience. One lecture. Two to four hours laboratory. One to three hours credit.

## ELECTRICAL TECHNOLOGY

**ELT 1113 —Residential/Light Commercial Wiring (Pre-Co Req: ELT 1192).**

Advanced skills related to the wiring of multifamily and small commercial buildings. Includes instruction and practice in service entrance installations, specialized circuits, and the use of commercial raceways. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1123—Commercial and Industrial Wiring.**

Instruction and practice in the installation of commercial and industrial electrical services including the types of conduit and other raceways, NEC code requirements, and three-phase distribution networks. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1133 — Introduction to the national Electric Code.**

This is a course in the layout, format, rules, and regulations set forth in the National Electric Code. Emphasis is placed on developing the student's ability to find information in the National Electric Code and applying that information in real-world applications. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1144 —AC and DC Circuits for Electrical Technology (Pre-Co Req: ELT 1192)**

Principles and theories associated with AC and DC circuits used in the electrical trades. Includes the study of electrical circuits, laws and formulas, and the use of test equipment to analyze AC and DC circuits. Two lectures. Four hours laboratory. Four hours credit.

**ELT 1192 —Fundamentals of Electricity.**

Fundamental skills associated with all electrical courses. Safety, basic tools, special tools, equipment and introduction to simple AC and DC circuits. One lecture. Two hours laboratory. Two hours credit.

**ELT 1213 — Electrical Power.**

Electrical motors and their installation. Instruction and practice in using the different types of motors, transformers, and alternators. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1253 - Branch Circuit and Service Entrance Calculations.**

Calculating circuit sizes for all branch circuits and service entrances in residential installation. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1273 - Switching Circuits for Residential, Commercial, and Industrial Applications.**

Introduction to various methods by which single pole, 3-way, and 4-way switches are used in residential, commercial, and industrial installations. Also includes installation and operation of low voltage, remote control switching. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1283 - Estimating the Cost of an Electrical installation.**

Cost of an electrical installation. Specifications set forth for a particular structure. Two lectures. Two hours laboratory. Three hours credit.

**ELT 1413 —Motor Control Systems.**

Installation of different motor control circuits and devices. Emphasis is placed on developing the student's ability to diagram, wire, and troubleshoot the different circuits and mechanical control devices. Two lectures. Two hour laboratory. Three hours credit.

**ELT 2424 - Solid State Motor Control.**

Principles and operation of solid state motor control. Also, the design, installation, and maintenance of different solid state devices for motor control. Two lectures. Four hours laboratory. Four hours credit.

**ELT 2613 — Programmable Logic Controllers (Prerequisite: ELT 1413).**

Use of programmable logic controllers (PLC's) in modern industrial settings. Also, the operating principles of PLC's and practice in the programming, installation, and maintenance of PLC's. Two lectures. Two hours laboratory. Three hours credit.

### **ELT 2623 —Advanced Programmable Logic Controllers.**

Advanced PLC course which provides instruction in the various operations, installations, and maintenance of electric motor controls. Also, information in such areas as sequencer, program control, block transfer used in analog input and output programming, and logical and conversion instructions. Two lectures. Two hours laboratory. Three hours credit.

## **EMERGENCY MEDICAL TECHNOLOGY/PARAMEDIC**

### **EMT 1116 — Emergency Medical Technician-Basic.**

This course includes responsibilities of the EMT during each phase of an ambulance run, patient assessment, emergency medical conditions, appropriate emergency care, and appropriate procedures for transporting patient. Two hours lecture. Six hours laboratory. Three hours clinical. Six hours credit.

### **EMT 1122 — Fundamentals of Prehospital Care (Pre/Corequisite: BIO 2524).**

This course introduces the student to the EMS systems, roles, and responsibilities of the paramedic, well being of the paramedic, illness and injury prevention, medical/legal issues, therapeutic communications, and life span development. One hour lecture. Two hours laboratory. Two hours credit.

### **EMT 1315— Airway Management and Ventilation. (Corequisite: EMT 1122. Pre/Corequisite: BIO 2524)**

This course will provide the student with the essential knowledge to attain a patient airway and managing the respiratory system using advanced techniques. Two hours lecture. Six hours laboratory. Five hours credit.

### **EMT 1415 — Patient Assessment (Corequisite: EMT 1122. Pre/Corequisite: BIO 2524).**

This course will teach comprehensive history taking and physical exam techniques. Two hours lecture. Six hours laboratory. Five hours credit.

### **EMT 1423 — EMS Special Considerations (Prerequisites: All 1st semester courses).**

This course will provide a comprehensive overview of providing care for the patient with special needs. One lecture hour. Four hours laboratory. Three hours credit.

### **EMT 1513 — EMS Clinical Internship I (Corequisites: EMT 1122, EMT 1315, and EMT 1415).**

This course will provide clinical training on the skills and knowledge obtained in the classroom and laboratory. This will be a supervised activity carried out in the clinical setting at approved sites. Nine hours clinical. Three hours credit.

**EMT 1523 — EMS Clinical Internship II (Prerequisite: EMT 1513).**

This course will provide clinical training on the skills and knowledge obtained in the classroom and laboratory. This will be a supervised activity carried out in the clinical setting at approved sites. Nine hours Clinical. Three hours credit.

**EMT 1613 — Prehospital Pharmacology (Prerequisites: All 1st semester courses).**

This course will teach comprehensive pharmacodynamics and pharmacokinetics. One hour lecture. Four hours laboratory. Three hours credit.

**EMT 1825 — Prehospital Cardiology (Prerequisites: All 1<sup>st</sup> semester courses).**

This class will teach a comprehensive approach to the care of patients with cardiovascular compromise. Two hours lecture. Six hours laboratory. Five hours credit.

**EMT 2412 — Prehospital OB/GYN (Prerequisites: All 1<sup>st</sup> semester courses).**

This course will provide a detailed understanding of the anatomic structures, physiology, and pathophysiology encountered when providing care in child emergencies. One lecture. Two hours laboratory. Two hours credit.

**EMT 2423 - Prehospital Pediatrics (Prerequisites: All 1st semester courses).**

This course will provide a detailed understanding of the anatomic structures, physiology, and pathophysiology encountered when providing care in child emergencies. One lecture. Four hours laboratory. Three hours credit.

**EMT 2552 — EMS Field Internship I (Prerequisites: All 1<sup>st</sup> semester courses).**

This course will provide clinical training in the skills and knowledge obtained in the classroom. These will be supervised activities carried out in the out of hospital field setting at approved sites with an approved preceptor. Six clinical hours. Two hours credit.

**EMT 2564 — Field Internship II (Prerequisites EMT 2552).**

This course will provide clinical training in the skills and knowledge obtained in the classroom. These will be supervised activities carried out in the out-of-hospital field setting at approved sites with an approved preceptor. Twelve hours clinical. Four hours credit.

**EMT 2714 — Prehospital Trauma (Prerequisites: All 1<sup>st</sup> semester courses).**

This course will provide instruction in the integration of pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for a suspected trauma patient. Two hours lecture. Four hours lab. Four hours credit.

**EMT 2855 — Prehospital Medical Care (Prerequisites: All 1st semester courses).**

This class will teach a comprehensive approach to the care of patients with medical compromise. Two hours lecture. Six hours laboratory. Five hours credit.

**EMT 2913 — Team Management (Prerequisites: All 1st semester of the 2<sup>nd</sup> year courses).**

This course teaches the leadership skills necessary to manage complex situations including patient care, management of the hazardous and crime scene, supervision, mentoring, and leading other personnel. One hour lecture. Four hours lab. Three hours credit.

## **ENGINEERING TECHNOLOGY**

**ENT 1114 — Graphic Communication (Co-Prerequisite: ENT 1313).**

Fundamentals and principles of drafting to provide the basic background needed for all other drafting courses. Two lectures. Four hours laboratory. Four hours credit.

**ENT 1123—Computational Methods for Drafting.**

This course is designed for the study of computational skills which are required for the development of accurate design and drafting methods. One lecture. Four hours laboratory. Three hours credit.

**ENT 1133 — Technology Graphics (Prerequisite: GRA 1143 or ENT 1114).**

Machine drafting methods and practice in pictorial and orthographic projections. Techniques and procedures in presenting screws, bolts, revets, thread types, gears, cams and design and working drawings, concepts of descriptive geometry and computer aided drawing. Six hours laboratory. Three hours credit.

**ENT 1143 — Geometric Dimensioning and Tolerancing (Prerequisite: ENT 1133).**

A continuation of conventional dimensioning with emphasis on concepts as adopted by the American National Standards Institute (ANSI). A study of international dimensioning symbols used to control tolerances of form, profile, orientation, run out, and location of features on an object. Two lectures. Two hours laboratory. Three hours credit.

**ENT 1153 — Basic Applications of Industrial Safety.**

This course introduces the concepts of health and safety in both off-the-job training and in an industrial environment. It aims to make the students safety-conscious in relation to personal safety, accident prevention, and methods of compliance. Three lectures. Three hours credit.

**ENT 1213 — Construction Materials.**

A course designed to familiarize the student with the physical properties of the materials generally used in the erection of structure, with a brief description of their manufacture. Two lectures. Two hours laboratory. Three hours credit.

**ENT 1223 — Wood Technology.**

Study of wood production manufacturing sales, construction industries, and experimentation of current woodworking skills. One lecture. Five hours laboratory. Three hours credit.

**ENT 1313 — Principles of CAD.**

This course will use CAD machine to design and draw various problems in the architectural, mechanical, and civil drafting areas. Emphasis will be placed on the operations of the CAD system to solve these problems. Two lectures. Two hours laboratory. Three hours credit.

**ENT 1323 — Intermediate CAD (Prerequisite: ENT 1313 & ENT 1114).**

This course is designed as a continuation of Principles of CAD. Subject area will include dimensioning, sectional views, and symbols. Two lectures. Two hours laboratory. Three hours credit.

**ENT 1413 — Elementary Surveying.**

Basic course dealing with principles of geometry, theory and use of instruments, mathematical calculations, and the control and reduction of errors. One lecture. Four hours laboratory. Three hours credit.

**ENT 1613 — Architectural Design I**

**(Prerequisite: GRA 1143/ ENT 1114 and ENT 1313).**

This course is a study and development of architectural design principles for a residential structure. One lecture. Four hours laboratory. Three hours credit.

**ENT 1813 — Basic Electricity & Electronics.**

Study of fundamental industrial electrical and electronic principles with experimentation and project construction. One lecture. Four hours laboratory. Three hours credit.

**ENT 2153 — Civil Drafting.**

Course dealing with basic principles of surveying and the development of topographical maps. Two hours lecture. Two hours laboratory. Three hours credit.

**ENT 2233 — Structural Drafting (Prerequisite: ENT 1114 or GRA 1143)**

Structural section, terms, and conventional abbreviations and symbols used by structural fabrications and erectors are studied. Knowledge is gained in the use A.I.S.C. Handbook. Problems are studied that involve structural designing and drawing of beams, columns, connections, trusses, and bracing. Two lectures. Two hours laboratory. Three hours credit.

**ENT 2243 — Cost Estimating (Prerequisite: ENT 1114).**

Preparation of material and labor quantity surveys from actual working drawings and specifications. Two lectures. Two hours laboratory. Three hours credit.

**ENT 2254 — Statics & Strengths of Material/Physical Science (Prerequisite: MAT 1313 or Consent of Instructor).**

Study of forces acting on bodies, movement of forces, stress of materials, basic machine design; beams, columns, and connections. Two lectures. Four hours laboratory. Four hours credit.

**ENT 2263 — Quality Assurance.**

The application of statistics and probability theory in quality assurance programs. Various product sampling plans will be studied as well as the development of product charts for defective units. Two lectures. Two hours laboratory. Three hours credit.

**ENT 2323 — Forging and Welding.**

Practice in hand forging; annealing, hardening, and tempering of tool steel; gas and electric welding. Six hours laboratory. Three hours credit.

**ENT 2343 — Advanced CAD (Prerequisite: ENT 1323).**

A continuation of Intermediate CAD. Emphasis is placed on the user coordinate system and 3D modeling. One lecture. Four hours laboratory. Three hours credit.

**ENT 2364 — Computer Numerical Control (Prerequisites: ENT 1313 & ENT 1114).**

A course designed to introduce the students to the basics of computer numerical control machines. Two lectures. Four hours laboratory. Four hours credit.

**ENT 2413 — History and Appreciation of Artcrafts.**

Growth and development of the artcrafts through the ages, instructional applications; practical designs; demonstrations and projects in leather, ceramics, wood working and other handicraft areas. Five hours laboratory. One lecture. Three hours credit.

**ENT 2423 — Mapping & Topography (Prerequisite: ENT 1413).**

Selected drafting techniques are applied to the problem of making maps, traverses, plot plans, plan and profile drawing using maps, field survey data, aerial photographs and related references, materials including symbols, notations, and other applicable standardized materials. Two lectures. Two hours laboratory. Three hours credit.

**ENT 2443—Principles of Manufacturing Management.**

This course will include a study of manufacturing processes and materials. A problem solving approach will be used, emphasizing the context of the manufacturing business and the complexities to be addressed. One lecture. Five hours laboratory. Three hours credit.

**ENT 2623 — Architectural Design II (Prerequisite: ENT 1613).**

This course emphasizes standard procedures and working drawings. Details involving architectural, mechanical, electrical, and structural drawings are covered, along with presentation of drawings and computer aided design assignments. One lecture. Four hours laboratory. Three hours credit.

**ENT 2643 — Architectural Rendering (Prerequisite: ENT 1613).**

Visual expression of architectural principles and structures. Perspective, shade, shadow, and color (using pencil, pen & ink, paint and new media). Two lectures. Two hours laboratory. Three hours credit.

**ENT 2713 — Architectural History.**

Analysis of achievements in the design and construction of major architectural developments from early times to present. Three lectures. Three hours credit.

**ENT 291(1-3) — Special Project (Prerequisite: Consent of Instructor).**

Skills and knowledge gained in other drafting courses. The instructors work closely with the student to insure that the selection of a project will enhance the student's learning experience. One lecture. Two to four hours laboratory. One to three hours credit.

**ENT 2923 — Fundamentals of Multimedia (Prerequisite: ENT 1613).**

A general overview of current issues in multimedia. Study of how multimedia can assist in the work environment; provides a basis for further study in multimedia design and production. One lecture. Four hours laboratory. Three hours credit.

## ENGLISH TECHNOLOGY

### **TEN 1103 — Developmental English I.**

This course stresses basic written communication skills. Essential rules of grammar, mechanics, punctuation, and usage needed for clear writing are examined and practiced in preparation for essay writing. Three lectures. One hour laboratory. Three hours institutional credit. (Not designed for transfer).

### **TEN 1203 — Developmental English II.**

A continuation of TEN 1103 with emphasis on language usage, paragraph development, and finished essays. Three lectures and one hour laboratory. Three hours institutional credit. (Not designed to transfer).

## FOREST TECHNOLOGY

### **AGT 1714 — Applied Soil Conservation and Use.**

This course is designed to introduce the student to the general principles of soil management, as it relates to forest growth. Three lectures. Two hours laboratory. Four hours credit.

### **FOT 1114 — Forest Measurements I.**

A classroom and field study of the basic principles and skills required for timber measurements. Direct and indirect systems of measurement and volume computation, forest type mapping, and graphic reporting are studied and practiced including an examination of current techniques of forest and timber inventory, stratification of volume tables and their use. Required are formal cruise reports, preparation of a cruise map, and the application of basic statistical knowledge to timber measurements. Two lectures. Four hours laboratory. Four hours credit.

### **FOT 1124 — Forest Measurements II.**

A continuation of Forest Mensuration I with emphasis on electronic and computer applications in forest measurements. Two lectures. Four hours laboratory. Four hours credit.

### **FOT 1314 — Forest Protection.**

A comprehensive course designed to give the student knowledge in identifying forest insects, diseases, and methods and techniques in controlling these. Also covers preventing and controlling forest fire. Two lectures. Four hours laboratory. Four hours credit.

### **FOT 1414 — Forest Products Utilization.**

The emphasis of this course includes primary and secondary products derived from wood and how they are manufactured and used in today's society. One lecture. Four hours laboratory. Four hours credit.

**FOT 1714 — Applied Dendrology.**

An elementary study of trees; the habitats and principle botanical features, forms, functions, and ecological relationships. The major commercially important forest trees of the region are examined in class and through extensive field and laboratory studies. Scientific classification of plants and identification of local flora are emphasized. Two lectures. Four hours laboratory. Four hours credit.

**FOT 1813 — Introduction to Forestry.**

This course is designed to acquaint the student with the role of a forest technician. Emphasis is placed on educational and job requirements, duties, career and salaries. The student is also made aware of how forestry fits into the state, national and international scene. Two lectures. Two hours laboratory. Three hours credit.

**FOT 2124 — Forest Surveying.**

A course to provide land surveying skills required in the forest industry. Includes instruction in interpreting legal descriptions, deeds, maps, and aerial photographs, and demonstration of equipment use and surveying practices. Two lectures. Four hours laboratory. Four hours credit.

**FOT 2214 — Applications of GIS/GPS in Forestry.**

This course includes using remote sensing, interpretation, and application of aerial photos and other remote sensing images in forestry. This course also included the global positioning system and other remote sensing devices used in forestry. Two lectures. Four hours laboratory. Four hours credit.

**FOT 2424 — Timber Harvesting.**

Principles of cost control and methods of harvesting timber drops are provided. Methods of buying and selling timber are emphasized in laboratory and field exercises. Two lectures. Four hours laboratory. Four hours credit.

**FOT 2614 — Silviculture I.**

A comprehensive course dealing with environmental and physiological factors and their influences on forest growth. Two lectures. Four hours laboratory. Four hours credit.

**FOT 2624 — Silviculture II.**

A continuation of Silviculture I. Two lectures. Four hours laboratory. Four hours credit.

**FOT 2911, FOT 2912, FOT 2913 — Special Problems in Forest Technology.**

A course designed to provide the student with practical application of skills and knowledge gained in other Forest Technology courses. The instructor works closely with the student to insure that the selection of a project will enhance the student's learning experience. Two to six hours laboratory. One to three hours credit.

**FOT 292(1-6) — Internship for Specialization.**

A continuation of FOT 2914. One to six weeks. One to six hours credit.

## **FUNERAL SERVICE TECHNOLOGY**

**FST 1113 — Mortuary Anatomy I**

A study of human anatomical structure with orientation to the embalming process and restorative art. Three lectures. Three hours credit.

**FST 1123 — Mortuary Anatomy II (Prerequisite: FST 1113).**

Continuation of Mortuary Anatomy I, including all remaining body systems. Major emphasis is on circulatory system and an introduction to pathology and public health concepts. Three lectures. Three hours credit.

**FST 1214 — Embalming I (Pre/Co-requisite: FST 1113).**

Basic orientation to embalming. Included are the terminology, safety procedures, and ethical protocols in preparation of human remains, physical and chemical changes in the dying process. A study of the chemical compositions of embalming fluid and government regulations applicable to the embalming process. Three lectures. Two hours laboratory. Four hours credit.

**FST 1224— Embalming II (Prerequisite: FST 1214, Co-requisite: FST 1113 & FST 1123).**

This course is a continuation of FST 1214 with emphasis placed on the principles and techniques of embalming. Topics covered include linear and anatomical guides, case analyses, handling special case problems, formulating chemical solutions, a complete analysis of the circulatory system, an explanation of the equipment used in the embalming process, and methods of injection and drainage. Three lectures. Two hours laboratory. Four hours credit.

**FST 1231—Clinical Embalming I (Pre/corequisite: FST 1214).**

Practically apply the theoretical principles taught in the Funeral Service Technology curriculum in the funeral establishment/commercial mortuary. One lecture. Three hours clinical. One hour credit.

**FST 1241—Clinical Embalming II (Prerequisites: FST 1214, FST 1224, & 1231).**

Practically apply the theoretical principles taught in the Funeral service technology curriculum. The student must arterial and cavity embalm a case in the presence of a certified member of the faculty. The faculty must certify the student minimally competent to embalm in order for the student to complete the course. One lecture. Three hours clinical. One hour credit.

**FST 1313 — Funeral Directing.**

The total funeral service education environment. Includes history duties, responsibilities, small business applications, ethical obligations, communication skills, and types of funeral services and ceremonies. Three lectures. Three hours credit.

**FST 1413 — Funeral Service Ethics and Law.**

Comprehensive review of the ethical and legal aspects involved in funeral services. Three lectures. Three hours credit.

**FST 1523 — Restorative Art/Color & Cosmetics (Prerequisite: FST 1113).**

An in-depth study of anatomical modeling. Familiarization with instruments, materials, and techniques of rebuilding human features. Study of color theory and application of restorative techniques in the funeral setting, which includes cosmetics and hair treatment. Two lectures. Two hours laboratory. Three hours credit.

**FST 2273—Thanatochemistry (Prerequisite: FST 1214 ).**

A survey of the principles of general, organic, bio, and embalming chemistry as they relate to the embalming process. Three lectures. Three hours credit.

**FST 2323 — Funeral Merchandising and Management (Prerequisite: FST 1313)..**

Study of merchandising and management procedures necessary to operate a successful funeral practice. Three lectures. Three hours credit.

**FST 2623 — Microbiology (Prerequisite: FST 1113).**

Designed to present the basic principles of microbiology as they relate to Funeral Service Education in the areas of sanitation, disinfecting, public health, and embalming practice. NOTE! This class does not contain a laboratory and will not meet the Lab Science requirements for graduation. Three lectures. Three hours credit.

**FST 2633 — Pathology (Pre/Corequisites: FST 1113 & FST 2623).**

The study of the nature of the disease process and how they affect various parts of the body, with particular emphasis on those conditions which relate to or affect the embalming or restorative art process. Three lectures. Three hours credit.

**FST 2713 — Psychosocial Counseling in Funeral Service.**

A study which examines psychological concepts in the areas of dynamics of grief, bereavement and mourning with particular emphasis on the roles of the funeral director in relation to these concepts as well as a facilitator of the funeral service, crisis intervener and after care counselor. This study also includes the Sociology of Funeral Service and those social phenomena that affect all elements of funeral service. It further emphasizes family structures, social structures, and the factors and change that relate to funeralization. Three hours lecture. Three hours credit.

**FST 2811 — Comprehensive Review.**

Review of entire curriculum, culminating with an exam designed to prepare students for the national board or various state board examinations. Must be taken during the final semester of coursework. One lecture. One hour credit.

## **GEOGRAPHICAL INFORMATION SYSTEMS**

**GIT 2113 – Database Construction and Maintenance (Pre/Co-Requirement: DDT 1313).**

A course designed to introduce database concepts and goals of database management systems, and relational, hierarchical, and network models of data. Included are Structured Query Language (SQL) and methods organizing and accessing data. Two lectures. Two hours laboratory. Three hours credit.

**GIT 2123 – Fundamentals of Geographical Information Systems (GIS) (Pre/Co-Requirement: DDT 1313).**

This course includes the use of computer mapping and databases in multiple applications. Included are incorporation of imagery and data into a graphical oriented database system. Also included are the fundamentals of geographical information systems techniques, approaches, and applications. Two lectures. Two hours laboratory. Three hours credit.

**GIT 2133 – Principles of Image Processing (Prerequisite: DDT 1313).**

This course includes fundamentals of map and air photo characteristics including scale, feature identification, and symbolization. Utilized are interpretation techniques of various products, including topographic and thematic maps, aerial photographs, and satellite images. Two lectures. Two hours laboratory. Three hours credit.

**GIT 2263 – Advanced Geographical Information Systems (Pre/Co-Requirement: DDT 2423 & GIT 2113).**

This is an integrated course that encompasses geographic data inputs, processing, and analysis directed toward objects of scientific investigation. One lecture. Four hours laboratory. Three hours credit.

**GIT 2273 – Remote Sensing.**

This course includes remote sensing, interpretation, and application of air photos and other remote sensing images. This course also includes the global positioning system and other remote sensing devices. One lecture. Four hours laboratory. Three hours credit.

**GIT 291(1-3) – Special Problem in Geographical Information Systems Technology (Prerequisite: 12 GIT courses).**

A course designed to provide the student with practical application of skills and knowledge gained in other Geographical Information Systems courses. The instructor works closely with the student to insure that the selection of a project will enhance the student's learning experience. One to three lectures. Two to six hours laboratory. One to three hours credit.

**GIT 292(1-6) – Supervised Work Experience in Geographical Information systems Technology (Prerequisite: Sophomore standing in Geographical Information Systems Technology).**

This course is a cooperative program between the industry and education and is designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of 1 semester hour per 45 contact hours. One to 6 lectures. Three to 18 hours externship. One to six hours credit.

## **HEATING, VENTILATION, AC, & REFRIGERATION. TECHNOLOGY**

**ACT 1125 — Basic Compressions Refrigeration.**

A course to introduce the student to the field of refrigeration and air conditioning. Emphasis is placed on principles of safety, thermodynamics, and heat transfer. Two lectures. Six hours laboratory. Five hours credit.

**ACT 1133 — Tools and Piping.**

A course to provide the student with various tube and pipe connecting techniques. Covers tools and test equipment required in heating, ventilation, air conditioning, and refrigeration. Two lectures. Two hours laboratory. Three hours credit.

**ACT 1213 — Controls.**

Fundamentals of gas, fluid, electrical, and programmable controls. Two lectures. Two hours laboratory. Three hours credit.

**ACT 1313 — Refrigeration System Components.**

An in-depth study of the components and accessories of a sealed system including metering devices, evaporators, compressors, and condensers. Two lectures. Two hours laboratory. Three hours credit.

**ACT 1713 — Electricity for Heating, Ventilation, Air Conditioning, and Refrigeration.**

Basic knowledge of electricity, power distribution, components, solid state devices, and electrical circuits. Two lectures. Two hours laboratory. Three hours credit.

**ACT 1813 — Professional Service Procedures.**

Business ethics necessary to work with both the employer and customer. Includes resume, record keeping, and service contracts. Two lecture. Two hours laboratory. Three hours credit.

**ACT 2324 — Commercial Refrigeration.**

A study of various commercial refrigeration systems. It includes installation, servicing, and maintaining systems. Two lectures. Four hours laboratory. Four hours credit.

**ACT 2414 — Air Conditioning I.**

Various types of residential and commercial air conditioning, including hydronic, absorption, and desiccant systems. Two lectures. Four hours laboratory. Four hours credit.

**ACT 2424 — Air Conditioning II (Prerequisite: ACT 2414).**

An in-depth course in the installation, start-up, maintenance, and air quality of complete heating and air conditioning systems. Two lectures. Four hours laboratory. Four hours credit.

**ACT 2433 — Refrigerant, Retrofit, & Regulation.**

Practical applications in refrigerants retrofit to ozone-friendly refrigerants. Includes lubrication change, charging, and system evaluation. One lecture. Four hours laboratory. Three hours credit.

**ACT 2513 — Heating Systems.**

Various types of residential and commercial heating systems. Includes gas, oil, electric, compression, and hydroponic heating systems. Two lectures. Two hours laboratory. Three hours credit.

**ACT 2624 — Heat Load and Air Properties.**

Introduction to heat load calculations for residential and light commercial heating, ventilation, air conditioning, and refrigeration systems. Included are air distribution, duct sizing, selection of grills and registers, types of fans, air velocity, and fan performance. An introduction is provided to air testing instruments and computer usage. Two lectures. Four hours laboratory. Four hours credit.

**ACT 291(1-3) — Special Project in Heating & A.C.**

**(Prerequisite: Consent of Instructor).**

A course designed to provide the student with practical application of skills and knowledge gained in other courses. The instructor works closely with the student to insure that the selection of a project will enhance the student's learning experience. Two-six hours laboratory. One-three hours credit.

**ACT 292(1-6) — Supervised Work Experience in Heating & A.C.**

**(Prerequisite: Consent of Instructor).**

This course is a cooperative program between industry and education and is designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of one semester hour per 45 industrial contact hours. Three-18 hours externship. One-6 hours credit.

## **INDUSTRIAL MAINTENANCE MECHANICS**

**IMM 1122—Industrial Maintenance Math & Measurement.**

Mathematical and measurement procedures and instruments related to industrial maintenance. One lecture. Two hours laboratory. Three hours credit.

**IMM 1132 — Industrial Maintenance Blueprint Reading.**

Blueprints, schematics, and plans used in industrial maintenance including instruction in nomenclature, different views, and symbols and notations. One lecture. Two hours laboratory. Two hours credit.

**IMM 1224 — Power Tool Applications.**

Safe and proper use of various hand tools and stationary power tools. Includes instruction in the use of hand power tools, bench grinders, threading machines, cutoff saws, drill presses, engine lathes, and milling machines. One lecture. Six hours laboratory. Four hours credit.

**IMM 1313 — Principles of Hydraulics & Pneumatics**

Instruction in basic principles of hydraulics and pneumatics, and the inspection, maintenance, and repair of hydraulic and pneumatic systems. One lecture. Four hours laboratory. Three hours credit.

**IMM 1514— Equipment Installation & Alignment.**

Instruction in pre-installation checks, assembly, location and layout of equipment, preparation of foundations and anchoring procedures, rigging and hoisting, and alignment and initial setup of equipment. Two lectures. Four hours laboratory. Four hours credit.

**IMM 1733 — Maintenance Welding and Metals.**

Instruction in different metals and their properties, and in basic SMAW welding and oxy-fuel cutting and brazing. One lecture. Four hours laboratory. Three hours credit.

**IMM 1813 — Industrial Electricity/Industrial Maintenance Mechanics.**

Instruction in terminology and basic principles of electricity, use of test equipment, safety practices for working around and with electricity, and basic electrical procedures. One lecture. Four hours laboratory. Three hours credit.

**IMM 1823— Advanced Electricity/Industrial Maintenance Mechanics (Prerequisite: IMM 1813).**

Advanced skills and knowledge associated with electrical systems in an industrial setting. Content includes instruction in the National Electrical Code, electrical circuits, motors, and estimating expenses for a given project. Six hours laboratory. Three hours credit.

**IMM 1913 — Special Project in Industrial Maintenance Mechanics (Prerequisite: Consent of instructor).**

Practical applications of skills and knowledge gained in other Industrial Maintenance Mechanics courses. The instructor works closely with the student to insure that selection of a special project enhances the students's learning experiences. One lecture. Four hours laboratory. Three hours credit.

**IMM 192(1-6) — Supervised Work Experience in Industrial Maintenance Mechanics. (Consent of instructor)**

A course which is a cooperative program between industry and education and is designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of one semester hour per 45 industrial contact hours. Three - 18 hours externship. One to six hours credit.

**MACHINE TOOL OP/ MACHINE SHOP TECHNOLOGY****MST 1114 — Power Machinery I.**

A course in the operation of power machinery. Includes instruction and practice in the safe operation of lathes, drill presses, and vertical mills. Two lectures. Four hours laboratory. Four hours credit.

**MST 1124— Power Machinery II (Prerequisite: MST 1114).**

A continuation of Power Machinery I with emphasis on more advanced applications of lathes, mills, shapers, and precision grinders. Two lectures. Four hours laboratory. Four hours credit.

**MST 1233 — Basic Shop Math.**

A basic unit of instruction for machine trade occupations, problem solving of whole numbers, fractions, decimals, percentages, averages, ratio, and proportion. Trade formulas in applied geometry and trigonometry. Three lectures. Three hours credit.

**MST 1313 — Machine Tool Mathematics.**

An applied mathematics course designed for machinists. Includes instruction and practice in algebraic and trigonometric operations essential for successful machining. Two lectures. Two hours laboratory. Three hours credit.

**MST 1413 — Blueprint Reading.**

A course in blueprint reading designed for machinists. Includes instruction and practice in reading industrial blueprints. Two lectures. Two hours laboratory. Three hours credit.

**MST 1423 — Advanced Blueprint Reading  
(Prerequisite: MST 1413).**

A continuation of Blueprint Reading with emphasis on advanced feature of technical prints. Includes instruction on the identification of various projections and views and on different assembly components. Two lectures. Two hours laboratory. Three hours credit.

**MST 1613 — Precision Layout.**

An introduction to the concepts and practice of precision layout for machining operations. Includes instruction and practice in the use of layout instruments. Two lectures. Two hours laboratory. Three hours credit.

**MST 2135 — Power Machinery III (Prerequisite: MST 1124).**

A continuation of the Power Machinery II course with emphasis on advanced applications of the engine lathe, milling machine, and grinding machine. Two lectures. Six hours laboratory. Five hours credit.

**MST 2144 — Power Machinery IV (Prerequisite: MST 2135).**

A continuation of Power Machinery III with emphasis on highly advanced operations of the radial arm drill, milling machine, engine lathe, and precision grinder. Two lectures. Four hours laboratory. Four hours credit.

**MST 2714 — Computer Numerical Control Operations I.**

An introduction to the application of computer numerical control (CNC) and computer assisted manufacturing (CAM) techniques and practices. Includes instruction and practice related to the use of the Cartesian coordinate system programming codes and commands and tooling requirement for NC/CAM machines. Three lectures. Two hours laboratory. Four hours credit.

**MST 2724 — Computer Numerical Control Operations II  
(Pre/Corequisite: MST 2714).**

A continuation of Computer Numerical Control Operations I. Includes instruction in writing and editing CNC programs, machine setup and operation, and use of CAM equipment to program and operate CNC machines. Two lectures. Four hours laboratory. Four hours credit.

**MST 2813 — Metallurgy.**

An introduction to the concepts of metallurgy. Includes instruction and practice in metal identification, heat treatment, and hardness testing. Two lectures. Two hours laboratory. Three hours credit.

**MST 2911 - 2913 — Special Problem in Machine Tool Technology.**

A course designed to provide the student with practical application of skills and knowledge gained in other Machine Tool related courses. The instructor works closely with the student to insure that the selection of a project will enhance the student's learning experience. Two - six hours laboratory. One - three hours credit.

## **MANUFACTURING TECHNOLOGY**

**DDT 2273 - Facilities Planning.**

This course deals with the techniques and procedures for developing an efficient facility layout and introduces some of the state-of-the-art tools involved, such as 3D design and computer simulation. Two lectures. Two hours laboratory. Three hours credit.

**INT 1214 - Fluid Power.**

This basic course provides instruction in hydraulics and pneumatics. The course covers actuators, accumulators, valves, pumps, motors, coolers, compression of air, control devices, and circuit diagrams. Emphasis is placed on the development of control circuits and troubleshooting techniques. Three lectures. Two hours laboratory. Four hours credit.

**INT 2114 - Control Systems I.**

This is an introductory course to provide information on various instrumentation components and processes. Topics include analyzing pressure processes, temperatures, flow, and level. Three lectures. Two hours laboratory. Four hours credit.

**MFT 2113 — Manufacturing Process I .**

The course would require study in manufacturing techniques from both a historical perspective and modern process improvement systems including plant layout, material handling, work station design, Kaizen, KanBan and Value Stream Mapping. Two lectures. Two hours laboratory. Three hours credit.

**MFT 2123 — Manufacturing Process II.**

The course would be a continuation of the previously listed, and introduce equipment and operations required to produce various products, including metal, wood and plastics processing. Also included would be an introduction to various material handling devices and process automation. Two lectures. Two hours laboratory. Three hours credit.

**MFT 2213 — Organizational Behavior.**

The course would help prepare students for their roles as change agents within an organization by identifying some of the potential issues that will be faced. Two lectures. Two hours laboratory. Three hours credit.

**MFT 291(1-3) - Special Problem in Automation and Control Technology**

A course to provide students with an opportunity to utilize skills and knowledge gained in other Automation and Control Technology courses. The instructor and student work closely together to select a topic and establish criteria for completion of the project. Two-six hours laboratory. One-three hours credit.

**ROT 2613 - Mechanical Systems.**

This course introduces the students to mechanical components and drive systems commonly used in the industry. Emphasis is placed on installation, maintenance, and troubleshooting of these components and systems. Two lectures. Two hours laboratory. Three hours credit.

## MARKETING TECHNOLOGY

**MMT 1113 – Marketing I.**

Study of principles and problems of marketing goods and services and methods of distribution from producer to consumer. Types, functions, and practices of wholesalers and retailers and efficient techniques in the development and expansion of markets. Three lectures. Three hours credit.

**MMT 1123 – Marketing II. (Prerequisite MMT 1113).**

A continuation of MMT 1113. Three lectures. Three hours credit.

**MMT 2233 – Human Resource Management.**

Objectives, organization, and functions of human resource management. Emphasis is placed on selection and placement, job evaluation, training, education, safety, health, employer-employee relationships, and employee services. Three lectures. Three hours credit.

**MMT 2513 – Entrepreneurship.**

Overview of activities that are involved in planning, establishing, and managing a small business enterprise. Topics to be covered will include planning, location, analysis, financing, and development of a business plan. Two lectures. Two hours laboratory. Three hours credit.

**MMT 2533 – Purchasing/Supply Management.**

Principles and techniques for developing an effective and efficient purchasing/supply/materials system. Emphasis on procedures, quantities, delivery, suppliers, price determination, outsourcing, service purchasing international purchasing, and quality specifications. Three lectures. Three hours credit.

**MMT 2713 — Principles of Real Estate.**

The course deals with the nature of the real estate market, types of ownership of property, contracts, methods of transferral of title, instruments used in transfer, title closing, financing, property management, insuring, and appraising. Three lectures. Three hours credit.

**MMT 2723 — Real Estate Law.**

Designed to give the student a general background in the law of real property and the law of real estate brokerage. Three lectures. Three hours credit.

**MMT 2733 — Real Estate Finance.**

This course provides a background in the principles and methods of financing real estate. Real estate mortgage credit operations of commercial banks are broken into the following broad areas: (1) the manner in which funds are channeled into the mortgage markets; (2) the financing of residential property; (3) the financing of special purpose property; and (4) the administrative tasks common to most mortgage departments. Both private and governmental institutions are covered. Three lectures. Three hours credit.

**MMT 2744 — Real Estate Appraisal.**

An introductory course covering the purposes of appraisal, the appraisal process and the different approaches, methods and techniques used to determine the value of various types of property. This course also includes standards of professional appraisal practice. Four lectures. Four hours credit.

## MATHEMATICS TECHNOLOGY

### **TMA 1103 — Developmental Math I.**

This course is designed for the student who is lacking in fundamental arithmetical skills. The course will cover the four fundamental operations in arithmetic: fractions, decimals, percentages, and verbal problems. Three lectures. Three hours institutional credit. (Not designed to transfer).

## OCCUPATIONAL THERAPY ASSISTANT TECH

### **OTA 1113 — Foundations of Occupational Therapy.**

This intake course is an introduction to the field of occupational therapy including history, role orientation, professional organizational structure, legal and ethical implications, legislation, specific practice arenas, and the process of service delivery. Three lectures. Three hours credit.

### **OTA 1142 — Wellness Systems.**

This intake course is designed to examine the context of service delivery for occupational therapy. Various models of health care, education, community and social systems will be examined. Professional language utilized in these systems will be included. In addition to term definitions, emphasis is placed on uniform terminology. Two lectures. Two hours credit.

### **OTA 1121 - Medical Terminology.**

This intake course is a study of medical language relating to body systems including diseases, physical conditions, abbreviations, and symbols as applied to occupational therapy. Professional language for occupational therapy will be included. One lecture. One hour credit.

### **OTA 1132 — Therapeutic Anatomy.**

This intake course will focus upon the structures of the human body and their respective functions. Emphasis will be placed upon the muscular, skeletal, and nervous systems. Two lectures. Two hours credit.

### **OTA 1213 — Pathology of Psychiatric Conditions.**

This intake course provides a basic knowledge of psychiatric disorders encountered in occupational therapy practice. Emphasis is on etiology, prognosis, and management of various psychiatric conditions. The role and function of the OTA in the treatment process is also emphasized. Three lectures. Three hours credit.

**OTA 1223 — Pathology of Physical Disability Conditions.**

This intake course provides a basic knowledge of selected diseases and conditions encountered in occupational therapy practice. Emphasis is on etiology, prognosis, and management of various pathological physical conditions. The role and function of the OTA in the treatment process is also emphasized. Three lectures. Three hours credit.

**OTA 1233 — Pathology of Developmental Conditions.**

This intake course provides a basic knowledge of selected diseases and conditions encountered in occupational therapy practice. Emphasis is on etiology, prognosis, and management of various pathological developmental conditions. The student will compare and contrast normal and abnormal developmental patterns. The role and function of the OTA in treatment process is also emphasized. Three lectures. Three hours credit.

**OTA 1242 — Pathology of Orthopedic Conditions (Prerequisites: OTA 1132 & OTA 1314).**

This intake course provides a basic knowledge of selected orthopedic conditions encountered in occupational therapy practice. Emphasis is placed upon mechanisms of pathology and basic treatment approaches. The role and function of the OTA in the treatment process is also emphasized. Two lectures. Two hours credit.

**OTA 1314 — Kinesiology (Prerequisite: OTA 1132).**

This intake course studies individual muscles and muscle functions, biomechanical principles of joint motion, gait patterns, normal movement patterns, and goniometry. Three lectures. Two hours laboratory. Four hours credit.

**OTA 1413 — Therapeutic Media (Prerequisite: OTA 1113).**

This manipulation course provides knowledge and use of tools, equipment, and basic techniques of woodworking and craft activities as therapeutic media. Emphasis is given to analyzation and instruction of activities frequently used as occupational therapy media. Two lectures. Two hours laboratory. Three hours credit..

**OTA 1423 — Occupational Therapy Skills I.**

This manipulative course provides fundamental knowledge of practice skills used with patients/clients across the life span and with various diagnoses. Observation and documentation techniques will be introduced. Two lectures. Two hours laboratory. Three hours credit.

**OTA 1433 — Occupational Therapy Skills II (Prerequisite: OTA 1423).**

This manipulative course provides intermediate practice skills used with patients/clients across the life-span and with various diagnosis. Two lectures. Two hours laboratory. Three hours credit.

**OTA 1513 — Group Process.**

This manipulative course introduces theory and research findings explaining group dynamics. The course teaches the student how to facilitate group effectiveness and the skills to apply that knowledge in practical situations. Methods and skills necessary to plan, write, and lead an occupational therapy group will be taught. The course focuses on the importance of group activity intervention primarily with the psychiatric population. Two lectures. Two hours laboratory. Three hours credit.

**OTA 1913 — Fieldwork IA (Prerequisite: OTA 1423).**

This course is designed to provide the student with an opportunity to observe and participate in clinical fieldwork. The student will also begin to develop professional work habits. Students are expected to function as participant observers in the assigned clinical setting. One lecture. Six hours clinical. Three hours credit.

**OTA 2443 — Occupational Therapy Skills III (Prerequisite: OTA1433).**

This manipulation course provides advanced practice skills used with patients/clients across the life-span and with various diagnoses. Two lectures. Two hours laboratory. Three hours credit.

**OTA 2714 — Concepts in Occupational Therapy (Prerequisite: OTA 1223, 1423, 1242).**

This manipulative course studies the occupational therapy treatment techniques for a variety of diagnoses while incorporating theoretical concepts. Three lectures. Two hours laboratory. Four hours credit.

**OTA 2812 — Healthcare Systems.**

This intake course is designed to examine the context of service delivery for occupational therapy. Various models of health care, education, community, and social systems will be examined. Two lectures. Two hours credit.

**OTA 2935 — Fieldwork IB (Prerequisite: OTA 1423).**

This application course is designed to provide the student with an opportunity to apply their knowledge of the occupational therapy process in clinical fieldwork. The student will also begin to develop professional work habits. Students are expected to function as participant observers in the clinical setting. One lecture. Twelve hours clinical. Five hours credit.

**OTA 2946 — Fieldwork IIA (Prerequisites: OTA 1113, 1121, 1132, 1213, 1223, 1233, 1242, 1314, 1413, 1423, 1433, 1513, 1913, 2443, 2714, 2812, 2935, 2961).**

This application course synthesizes previous didactic instruction and clinical experiences obtained in Fieldwork I. In Level IIA the student may encounter a variety of populations in a traditional or nontraditional based setting. Students will assume increasing responsibilities under supervision as appropriate for the setting. Eighteen hours clinical. Six hours credit.

**OTA 2956 — Fieldwork IIB (Prerequisites: OTA 1113, 1121, 1132, 1213, 1223, 1233, 1242, 1314, 1413, 1423, 1433, 1513, 1913, 2443, 2714, 2812, 2935, 2961).**

This application course synthesizes previous didactic instruction and clinical experiences obtained in Fieldwork I. In Level IIB, the student may encounter a variety of populations in a traditional or nontraditional based setting. Students will assume increasing responsibilities under supervision as appropriate for the setting. Eighteen hours clinical. Six hours credit.

**OTA 2961 — Occupational Therapy Transitions I.**

This course provides information and guidance to the student for their transitional process of becoming an Occupational Therapy Practitioner. This course will encompass a variety of professional skills and concepts. In addition, vital life skills will be discussed. One lecture. One hour credit.

**OTA 2971 — Occupational Therapy Transitions II (Prerequisite: OTA 2961).**

This course provides final preparation to the student for the transitional process of becoming an Occupational Therapy Practitioner. Three day seminar. One hour credit.

## **PARALEGAL TECHNOLOGY**

**LET 1113 — Introduction to Law.**

This course provides an overview of major principles and functions of the state and federal legal systems, introduces various legal fields for professional opportunities, presents legal vocabulary, gives an overview of different areas of law, and presents ethics. Three lectures. Three hours credit.

**LET 1213 — Legal Research (Prerequisite: LET 1113).**

This course is an introduction to basic sources of law and the methods of legal research, including ethics. Two lectures. Two hours laboratory. Three hours credit.

**LET 1513 — Family Law.**

This course is a study of the areas of law pertaining to domestic relations, emphasizing ethics. Three hours lecture. Three hours credit.

**LET 1523 — Wills and Estates.**

This course is an introduction to the laws of inheritance and estates, basic concepts of estates and wills, probate procedures, and preparation of documents while emphasizing ethics. Three lectures. Three hours credit.

**LET 1713 — Legal Writing (Prerequisite: LET 1213) .**

This course includes composition of legal communications, briefs, memoranda, and other legal documents with an emphasis on ethical considerations. Two hours lecture. Two hours laboratory. Three hours credit.

**LET 2313 — Civil Litigation I (Prerequisite: LET 1213).**

This course is designed to study the litigation process. Emphasis is on the structure of the Mississippi Court System and on gathering information and evidence, summarizing and arranging materials, maintaining docket and file control, developing a litigation case, and interviewing clients and witnesses, using ethical standards. Two lectures. Two hours laboratory. Three hours credit.

**LET 2323 — Torts (Prerequisite: LET 1113).**

This course provides instruction in the area of law which deals with private and civil wrongs and injuries as distinguished from breach of contract. Concentrates on the elements of a tort, types of torts, damages, remedies, and ethics. Three lectures. Three hours credit.

**LET 2333 — Civil Litigation II (Prerequisite: LET 2313).**

This course is designed to continue the study of the litigation process from discovery through appeal. Two lectures. Two hours laboratory. Three hours credit.

**LET 2453 — Real Property I.**

This course is an introduction to real property law including ownership and transfer, employing ethics. Three lectures. Three hours credit.

**LET 2463 — Real Property II (Prerequisite: LET 2453).**

Examine legal documents related to real property as recorded in the chancery clerk's office, the tax assessor's office, and the circuit clerk's office and compile a title abstract. Two hours lecture. Two hours laboratory. Three hours credit.

**LET 2523 — Bankruptcy Law (Prerequisite: LET 1113)**

This course is an introduction to federal bankruptcy law. Emphasis is placed on federal bankruptcy statutes, chapters and forms. Three lectures. Three hours credit.

**LET 2633 — Law Office Management (Prerequisite: LET 1113)**

This course provides practical application of daily legal office skills needed in the legal field, professional enrichment presentations, history of the profession, professional ethics through fact analysis, and an overview of law office management. Three hours lecture. Three hours credit.

**LET 2913 — Special Problem in Paralegal Technology.**

A course to provide students with an opportunity to utilize skills and knowledge gained in other Paralegal Technology courses. The instructor and student work closely together to select a topic and establish criteria for completion of the project. Six hours laboratory. Three hours credit.

**LET 2923 — Internship for Paralegal.**

Supervised practical experience in a private law office, courts, government offices, or businesses. Provides students the opportunity to apply theory presented in the classroom in a supervised work setting. (135 clock hours supervised work experience minimum). Three hours credit.

## READING TECHNOLOGY

**TRE 1103 — Developmental Reading I.**

Special reading instruction for students deficient in basic reading skills. Stresses word attack skills, comprehension, vocabulary, and basic study skills. Three lectures. One hour laboratory. Three hours institutional credit (Not designed to transfer).

**TRE 1203 — Developmental Reading II.**

A continuation of TRE 1103. Three lectures. One hour laboratory. Three hours institutional credit. (Not designed to transfer).

## SURGICAL TECHNOLOGY

**SUT 1113 — Fundamentals of Surgical Technology (Corequisites: All 1st semester courses) (Prerequisites: CPR-Health Care Provider).**

This is a basic introductory course including hospital and surgical suite organization and environment, history, legal responsibilities, terminology, interpersonal relationships, pharmacology, and anesthesia. Three lectures. Three hours credit.

**SUT 1216 — Principles of Surgical Technique (Corequisites: All 1st semester courses).**

This course is a comprehensive study of aseptic technique, safe patient care, and surgical techniques. One lecture. Ten hours laboratory. Six hours credit.

**SUT 1314 — Surgical Anatomy (Corequisites: All 1st semester courses).**

Emphasis is placed on the structure and function of the human body as related to surgery. Application of the principles of surgical anatomy to participation in clinical experience. Four lectures. Four hours credit.

**SUT 1413 — Surgical Microbiology (Corequisites: All 1st semester courses).**

This is an introduction to pathogenic microorganisms related to surgery and their effect on wound healing and infection. It includes principles of sterilization and disinfection. Three lectures. Three hours credit.

**SUT 1518 — Basic and Related Surgical Procedures (Prerequisites: All 1st semester courses & CPR-Health Care Provider).**

This course includes instruction in regional anatomy, pathology, instrumentation, and surgical techniques in general surgery, gynecology, obstetrics, and urology. It requires clinical experience in area hospital surgical suites and related departments. Four lecture. Twelve hours clinical. Eight hours credit.

**SUT 1528 — Specialized Surgical Procedures (Prerequisites: All 1st semester courses & CPR-Health Care Provider).**

This course includes instruction in regional anatomy, pathology, instrumentation, and techniques in surgical specialty areas of ear, nose and throat; ophthalmology; oral & maxcillo facial surgery, pediatrics, and plastic. This course requires clinical experience in area hospital surgical suite and related departments. Four lectures. Twelve hours clinical. Eight hours credit.

**SUT 1538 — Advanced Surgical Procedures (Prerequisites: All 2nd semester courses & CPR-Health Care Provider).**

This course includes instruction in regional anatomy, pathology, instrumentation, and techniques in surgical specialty areas of orthopedics, neurosurgery, thoracic, peripheral, vascular, cardiovascular surgery, and employability skills. This course requires clinical experience in area hospital surgical suites and related department, and a comprehensive final examination. Four lectures. Twelve hours clinical. Eight hours credit.

## WORK-BASED LEARNING

**WBL 191(1-3) — Work-Based Learning I.**

**WBL 192(1-3) — Work-Based Learning II.**

**WBL 193(1-3) — Work-Based Learning III.**

**WBL 291(1-3) — Work-Based Learning IV.**

**WBL 292(1-3) — Work-Based Learning V.**

**WBL 293(1-3) — Work-Based Learning VI.**

Work-Based Learning is a structured work-site learning experience for Career/Technical majors in which the student, Work-Based Learning Coordinator, and worksite supervisor/mentor develop and implement a business/education contract (training agreement). Work-Based Learning is designed to integrate the student's academic and technical skills into a work environment. The program includes regular meetings and seminars with school personnel for supplemental instruction and feedback (progress reviews). Six semesters of Work-Based Learning are offered with 1-3 semester hours credit available per semester and summer sessions. Credit is awarded based on the following chart:

90 clock hours at work per semester = 1 hour credit

180 clock hours at work per semester = 2 hours credit

270 clock hours at work per semester = 3 hours credit

A maximum of six hours of WBL credits may be substituted for technical courses (required or elective) upon the approval of the student's advisor and the WBL Coordinator.

# CAREER COURSE DESCRIPTIONS

The following course descriptions indicate the number of lecture and laboratory periods the course meets per week. Credit is awarded in terms of semester hours. The credit will apply toward career certificates. It is not designed to transfer in an academic major.

## COSMETOLOGY

### **COV 1122 — Cosmetology Orientation**

This course will cover the history, career opportunities, life skills, professional image, Mississippi Cosmetology laws, rules and regulations and communicating for success in the cosmetology industry. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Two lectures. Two hours credit.

### **COV 1245 — Cosmetology Sciences I**

This course consists of the study of bacteriology, sterilization, and sanitation. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Three lectures. Six hours laboratory. Five hours credit.

### **COV 1255 — Cosmetology Sciences II (Pre/corequisite: COV 1245)**

This course consists of the study of anatomy and physiology. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations in cosmetology practices and safety precautions associated with each. Three lectures. Six hours laboratory. Five hours credit.

### **COV 1263 — Cosmetology Sciences III (Prerequisite: COV 1255)**

This course consists of the application and demonstration of chemistry and electricity. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Two lectures. Three hours laboratory. Three hours credit.

### **COV 1426 — Hair Care I**

This course consists of the study of properties of the hair and scalp; principles of hair design; shampooing, rinsing, and conditioning; haircutting; hairstyling; braiding and braid extensions; wigs and hair enhancements; chemical texture services; and hair coloring. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Two lectures. Twelve hours laboratory. Six hours credit.

**COV 1436 — Hair Care II (Pre/corequisite: COV 1426)**

This course consists of the advanced study of properties of the hair and scalp, principles of hair design; shampooing, rinsing, and conditioning; haircutting, hairstyling; braiding and braid extensions; wigs and hair enhancements; chemical texture services; and hair coloring. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Two lectures. Twelve hours laboratory. Six hours credit.

**COV 1443 — Hair Care III (Pre/corequisite: COV 1436)**

This course consists of the practical applications of the study of properties of the hair and scalp; principles of hair design; shampooing, rinsing, and conditioning; haircutting, hairstyling; braiding and braid extensions; wigs and hair enhancements; chemical texture services; and hair coloring. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Nine hours laboratory. Three hours credit.

**COV 1522 — Nail Care I.**

This course consists of basic nail care services including nail structure and growth, manicuring and pedicuring, and advanced nail techniques. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. One lecture. Three hours laboratory. Two hours credit.

**COV 1532 — Nail Care II (Pre/corequisite: COV 1522)**

This course consists of basic nail care services including nail structure and growth, manicuring and pedicuring, and advanced nail techniques. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. One lecture. Three hours laboratory. Two hours credit.

**COV 1542 — Nail Care III (Pre/corequisite: COV 1532)**

This course consists of basic nail care services including nail structure and growth, manicuring and pedicuring, and advanced nail techniques. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Six hours laboratory. Two hours credit.

### **COV 1622 — Skin Care I**

This course consists of the introduction to basic skin care services including anatomy of skin, disorders of skin, hair removal, facials, and facial makeup. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. One lecture. Three hours laboratory. Two hours credit.

### **COV 1632 — Skin Care II (Pre/corequisite: COV 1622)**

This course consists of basic skin care services including anatomy of skin, disorders of skin, hair removal, facials, and facial makeup. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. One lecture. Three hours laboratory. Two hours credit.

### **COV 1642 — Skin Care III (Pre/corequisite: COV 1632)**

This course consists of advanced skin care services including anatomy of skin, disorders of skin, hair removal, facials, and facial makeup. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. Six hours laboratory. Two hours credit.

### **COV 1722 — Salon Business I**

This course will cover preparing to operate a successful salon. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. One lecture. Three hours laboratory. Two hours credit.

### **COV 1732 — Salon Business II (Pre/corequisite: COV 1722)**

This course will cover operating a successful salon and seeking employment. Included are classroom theory and lab practice as governed by Mississippi cosmetology laws, rules, and regulations involved in cosmetology practices and safety precautions associated with each. One lecture. Three hours laboratory. Two hours credit.

### **COV 2816 – Cosmetology Teacher Training I (Pre/Co-Requisite: Students must have at least two years of active practical experience as a licensed cosmetologist and currently hold a valid Mississippi cosmetology license).**

Instruction will be given in developing appropriate communication skills, effective use of visual aids, identification of various teaching styles, and practical application of cosmetology instruction. Three lectures. Nine hours laboratory. Six hours credit.

**COV 2826 – Cosmetology Teacher Training II (Pre/Co-Requisite: COV 2816).**

Instruction will be given in development of instructional methods, development of visual aids, development of effective evaluation, and practical application of cosmetology instruction. Three lectures. Nine hours laboratory. Six hours credit.

**COV 2836 – Cosmetology Teacher Training III (Pre/Co-Requisite: COV 2826).**

Instruction will be given in development of appropriate lesson plans and practical application of cosmetology instruction. Three lectures. Nine hours laboratory. Six hours credit.

**COV 2846 – Cosmetology Teacher Training IV (Pre/Co-Requisite: COV 2836).**

Instruction will be given in classroom management techniques; cosmetology laws, rules, and regulations; and practical application of cosmetology instruction. Three lectures. Nine hours laboratory. Six hours credit.

## **PRACTICAL NURSING**

**PNV 1213 — Body Structure and Function.**

This course is a study of body structure and function essential to safe and effective nursing care. Each system of the body is covered with applications to nursing. Three lectures. Three hours credit.

**PNV 1427 — Fundamentals of Nursing (Corequisite: PNV 1436).**

This course provides the student with the basic knowledge and skill necessary to care for the individual in wellness and illness and is applied across the life-span. Seven lectures. Seven hours credit.

**PNV 1436 — Fundamentals of Nursing Lab/Clinical (Corequisite: PNV 1426).**

This course provides demonstration of and supervised practice of the fundamental skills related to practical nursing. Nine hours lab. Four and one-half hours clinical. Six hours credit.

**PNV 1524 — IV Therapy Concepts.**

This course is designed to prepare the practical nursing student to perform the expanded role of IV therapy as outlined in the Mississippi Nursing Practice Law, Rules, and Regulations. The student, upon completion of the practical nursing program and successful passage of the licensure examination, is eligible to apply for IV certification as outlined in the above mentioned rules and regulations. Three lectures. Two hours lab. Four credit hours.

**PNV 1614 — Medical/Surgical Nursing (Corequisite: PNV 1622).**

This course provides the student with the basic nursing theory and skills to provide safe, effective care for a client experiencing an alteration in health in the following body systems: cardiovascular, respiratory, blood and lymphatic, urinary and reproductive, cancer, HIV and immunology. Pharmacological and nutritional therapy, as well as system-specific oncological considerations, are included. Four lectures. Four hours credit.

**PNV 1622 — Medical/Surgical Nursing Clinical (Corequisite: PNV 1614).**

This course includes supervised clinical experiences for application of medical/surgical theory, the development of skill, and the use of nursing process. Six hours clinical. Two hours credit.

**PNV 1634 — Alterations in Adult Health (Corequisite: PNV 1642).**

This course provides the student with the basic nursing theory and skills to provide safe, effective care for a client experiencing an alteration in health in the following body systems: endocrine, musculoskeletal, neurological, sensory, gastrointestinal, GI accessory organs, and integumentary. Pharmacological and nutritional therapy, as well as system-specific oncological considerations are included. Four lectures. Four hours credit.

**PNV 1642 — Alterations in Adult Health Clinical (Corequisite: PNV 1634).**

This course includes supervised clinical experience for application of medical/surgical theory and the development of skills and the use of nursing process. Six hours Clinical. Two hours credit.

**PNV 1715 — Maternal-Child Nursing.**

This course provides the student with the basic knowledge and skills to provide safe effective care for clients and families during pregnancy, postpartum, infancy, and childhood. 4.7 hours lecture. One hour clinical. Five credit hours.

**PNV 1813 — Mental Health Concepts.**

This course provides an introduction to mental health concepts. Clinical experiences will provide application of theory. 2.7 hours lectures. One hour clinical. Three hours credit.

**PNV 1914 — Nursing Transition.**

Nursing Transition promotes the development of clinical decision-making skills and an interest in continued professional development. Legal aspects of nursing and employment opportunities and responsibilities as well as preparation for the State Board Exam are included. Two hours lecture. Two hours lab. Three hours clinical. Four credit hours.

## **WELDING, BRAZING AND SOLDERING**

### **WLV 1116 — Shielded Metal Arc Welding I (SMAW).**

This course is designed to teach students welding techniques using E-6010 electrodes. One lecture. Ten hours laboratory. Six hours credit.

### **WLV 1124 — Gas Metal Arc Welding (GMAW).**

This course is designed to give the student experience in various welding applications with the GMAW welder including short circuiting and/or pulsed transfer. One lecture. Six hours laboratory. Four hours credit.

### **WLV 1136 — Gas Tungsten Arc Welding (GTAW).**

This course is designed to give the student experience in various welding applications with the GTAW process. One lecture. Ten hours laboratory. Six hours credit.

### **WLV 1143 — Flux Cored Arc Welding (FCAW).**

This course is designed to give the student experience in FCAW. One lecture. Four hours laboratory. Three hours credit.

### **WLV 1155 — Pipe Welding (Prerequisites WLV 1116 and WLV 1226).**

This course is designed to give the student experience in pipe welding procedures. One hour lecture. Eight hours laboratory. Five hours credit.

### **WLV 1162 — Gas Metal Arc Aluminum Welding.**

This course is designed to give the student experience in Gas Metal Aluminum Welding. One Lecture. Two hours laboratory. Two hours credit.

### **WLV 1171 — Welding Safety, Inspection, and Testing Principles.**

This course is designed to give the student experience in safety procedures, inspection, and testing of welds. Two hours laboratory. One hour credit.

### **WLV 1226 — Shielded Metal Arc Welding II.**

This course is designed to teach students welding techniques using E-7018 electrodes. One lecture. Ten hours laboratory. Six hours credit.

### **WLV 1232— Drawing and Welding Symbol Interpretation.**

This course is designed to give the student experience in reading welding symbols and drawings. One lecture. Two hours laboratory. Two hours credit.

### **WLV 1252 — Advanced Pipe Welding (Prerequisite WLV 1155).**

This course is designed to give the students advanced pipe welding techniques using shielded metal arc and gas tungsten arc welding processes. One hour lecture. Two hours laboratory. Two hours credit.

**WLV 1314 — Cutting Processes.**

This course is designed to give the student experience in oxyfuel cutting principles and practices, air carbon cutting and gouging, and plasma arc cutting. Two lectures. Four hours laboratory. Two lectures. Four hours laboratory. Four hours credit.

**WLV 1912 — Special Problems in Welding and Cutting Technology.**

A course to provide the students with an opportunity to utilize skills and knowledge gained in other Welding and Currig Technology courses. The instructor and student work closely together to select a topic and establish criteria for completion of the project. Four hours laboratory. Two hours credit.

**WLV 192(1-6) — Supervised Work Experience in Welding and Cutting Technology.**

A course which is a cooperative program between industry and education designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of one semester hour per 45 industrial contact hours. 45 to 270 industry hours. One to six hours credit.

**WLV 2812 — Welding Metallurgy.**

This course is designed to give the student experience in the concept of metallurgy and how metals react to internal and external strains and temperature changes. Two hours lecture. One hour laboratory. Two hours credit.

**WLV 2913 — Welding Code.**

This course is designed to give the student experience in the various welding codes and the experience in interpretation of these codes. Three hours lecture.

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## **ADDENDUM A: Information Technology Use Policy**

### **General**

Holmes Community College is dedicated to providing the best possible services to its employees and students and is committed to ensuring that the information system resources are used appropriately for the purposes they are intended. This policy governs the use of all computers, computer-based communications, networks, and all related equipment (including vocational equipment) administered by Holmes Community College, referred to hereafter as HCC. This policy is designed to help you understand the expectations for the use of the resources provided. Restrictions placed on use are to protect the resources and integrity of the network and to comply with all local, state, and federal laws and regulations. By using these facilities and equipment the user acknowledges consent to abide by this policy.

## **Authorized Users**

An authorized user is defined as any employee, student, or guest that has completed the Information Technology Use Agreement Form and/or has been approved by the Information Technology Department, referred to hereafter as IT. The form can be found at [www.holmescc.edu/policies/itup](http://www.holmescc.edu/policies/itup). For students, the agreement form will be part of the enrollment application.

## **Appropriate and Acceptable Use**

The computer facilities, equipment, and software of HCC are to be used only by authorized users. Appropriate use is defined as official business conducted by authorized users. However, occasional or incidental use by authorized users for personal, non-business purposes is acceptable, as is the case with personal phone calls, provided that all use is compliant with this policy. Users need to demonstrate a sense of responsibility and may not abuse the privilege. The user should be aware that any communications, files or use of HCC information systems resources are not to be considered private or confidential, regardless of passwords and deletions, and may be monitored, searched and/or archived at any time. HCC reserves the right to prohibit access to certain sites, material and programs. If questions arise as to whether a specific activity complies with appropriate and acceptable use, contact IT. Contact information is located at [www.holmescc.edu/policies/itup](http://www.holmescc.edu/policies/itup)

The following are some guidelines for appropriate and acceptable use:

- Be polite. Do not be abusive in your communications or emails to others.
- Use appropriate language. Do not use obscene language, vulgarities, sexually suggestive or any language that may be derogatory toward race, religion, ethnicity, or gender.
- Communications should be in a professional manner and not reflect negatively upon HCC.
- Proper email etiquette is recommended. [www.holmescc.edu/policies/itup/etiquette.htm](http://www.holmescc.edu/policies/itup/etiquette.htm)
- Email groups have been created to easily communicate business related information to faculty and staff. Refrain from using these addresses for non-business related material.
- Alternate means of delivery should be considered when sending large attachments especially to multiple recipients.
- Users are responsible for the physical condition of the equipment that they are operating. User shall not break, disassemble or otherwise cause damage to any computer or computer related equipment.
- Sharing of resources or access to resources between students, faculty and staff must be approved by IT.
- If you learn of a virus alert or security threat, report it only to IT for evaluation immediately. Do NOT take any other action.  
The following are expressly prohibited:
- Violating any local, state or federal laws and regulations while using HCC facilities and equipment.
- Viewing, storing or distributing obscene, pornographic or objectionable material.
- Participating in gambling.
- Downloading or distributing or attempting to download or distribute pirated software or data.

- Deliberately propagating any virus, worm, Trojan horse, or trap-door program code.
- Disabling or overloading or attempting to disable or overload any system or network.
- Attempting to hide your identity or represent yourself as someone else when sending email or any other type of communication.
- Intentionally causing network congestion or significantly hampering the ability of other users to access resources.
- Disclosing any confidential or HCC information unless granted by HCC.
- Violating copyright laws to include copy, retrieve, modify, or forward copyright materials except as permitted by the copyright owner.
- Using HCC information systems resources for soliciting, personal financial gain, partisan political activities or distributing “junk” email such as chain letters or spam.
- Engaging in any activity that may disrupt the use of resources for other users.
- Using the messenger service. This service is to be utilized only by Computer Services.
- Installing servers, workstations, or notebook computers onto the network for any intention. Installations must be approved by CS prior to installation to insure the security and integrity of the network.

### **Software**

Software programs, including but not limited to, Internet downloaded programs, utilities, add-ins, shareware, freeware, Internet access software, patches, or upgrades, shall not be installed, removed or altered on any desktop, laptop, or server without prior approval from IT. The software on each computer will be inventoried on a regular basis to ensure compliance. Software owned or licensed by HCC may not be copied to alternate media except for backup purposes, distributed by email, transmitted electronically, or used in its original form on other than the equipment it was licensed for. In no case is the license agreement or copyright to be violated. Software licensed to HCC is to be used for its intended purpose according to the license agreement. Users are responsible for using software in a manner consistent with the licensing agreements of the manufacturer.

### **Hardware**

Modifications or additions are not allowed without prior approval from IT. Do not relocate hardware unless it is approved by the person responsible for the equipment and a transfer form has been completed and delivered to Purchasing. Information systems equipment should not be removed from the premises of HCC without the permission from the department head and/or Purchasing. In the event equipment is to be off premises for an extended time, the employee responsible for the equipment must file a written hand receipt with Purchasing. Mobile equipment such as notebook computers, projectors, and cameras used in daily offsite work may be taken off campus by the person it was assigned to.

### **Security**

Important and sensitive data is processed and stored on HCC computer systems. Local area networks (LAN), wide area networks (WAN), and the Internet increase the risk that data can be inappropriately accessed and used. Usernames and passwords are

for the use of the specifically assigned user and are to be protected from abuse and/or use by other individuals. HCC has implemented several security measures to assure the safety and integrity of the network and data. Anyone who attempts to disable, defeat or circumvent any security measure will be subject disciplinary action.

- Do NOT give your password to anyone other than IT.
- Do NOT post your password in a readily accessible area (ex. On monitor, an unlocked desk drawer).
- Do NOT leave your computer logged on while not in use.
- Do NOT use someone else's account
- Do NOT let someone use a computer while logged on with your account.
- Do NOT allow someone to connect a computer to the HCC network without approval from IT.
- Do NOT attempt to hack/crack passwords
- Do NOT attempt to hack/crack into any systems.
- Do NOT engage in any activity which may compromise the security of HCC electronic data, computer systems, internal networks, or external networks.
- Do NOT use any wireless devices without authorization from IT. This includes, but is not limited to, routers, hubs, or modems.
- Do NOT connect computer systems to the network while modems are in use.
- Do NOT create additional domains or workgroups.
- Do NOT connect any hardware to the HCC network without prior approval from IT.

### **Data Backups**

Even though IT maintains regular backups, it is the sole responsibility of each user to backup data that is important to them. Space has been reserved on selected servers for each employee to store important business related material. Do not store non-business related material in this space. Some classes provide network storage for students. This space is reserved for classroom material only. IT performs a daily backup of all network data files and system files. A complete backup is stored offsite monthly in the event of theft, fire, or other major disaster. This backup does not include data on each workstation.

### **Reliability**

HCC/IT makes no warranties of any kind, whether expressed or implied, for the services that it is providing. HCC/IT will not be responsible for any damages you suffer. This includes, but not limited to, loss of data resulting from hardware failure, delays, non-deliveries, incorrect deliveries, or service interruptions.

### **Violations**

All users are required to report any violations of this policy immediately to IT. The Copyright Act of 1976 (amended in 1984) imposes fines up to \$250,000 and up to two years imprisonment for first offenders who have willfully infringed a software copyright. The aim is to deter and punish software criminals. The law also applies to individuals and businesses that misuse copyrighted software. All copyright violations at HCC should be reported to CS so appropriate action can be taken to ensure HCC is operating within the scope of the law.

Any user who violates this policy is subject to disciplinary action which may include paying for damages, fines, denial of access to technology resources or other remedies applicable under local, state or federal laws or regulations. Faculty and Staff may also be subject to probation, suspension, or termination. Students may also be subject to

suspension, expulsion, and /or other remedies as outlined in school and district policies. Furthermore, in the event of any illegal activity, the user may also be reported to the appropriate law enforcement authority which may result in criminal or civil prosecution. HCC will fully cooperate with law enforcement during an investigation.

### **Revisions**

This policy is subject to revision at any time. It is the user's responsibility to conform to the current policy. The current policy and all revisions will be posted at [www.holmescc.edu/policies/itup](http://www.holmescc.edu/policies/itup)

