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 2213 — Principles of Accounting I (Prerequisite: MAT 0124 or higher or placement score for MAT 1233 or higher).

Study of the fundamentals and application of financial accounting principles that relate to business. The topics to be covered include the accounting cycle and the accounting systems for service and merchandising businesses. Three lectures. Three hours credit.

ACC 2223 — Principles of Accounting II (Prerequisite: ACC 2213).

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

ARMY

AMR 111(2-3) — Foundations of Officership Lecture & Lab.

Introduction to the personal challenges and competencies which are critical for effective leadership in the Armed Forces. Students will examine the role of leadership, officership, and the Army profession as well as develop life skills such as goal settings, time management, physical fitness, and stress management. The focus is on developing basic knowledge and comprehension of Army leadership dimensions. Includes a leadership lab and physical training. One to three lecture(s). One hour laboratory. Two to three hours credit.

AMR 112(2-3) — Basic Leadership and Lab.

Fundamental leadership and training techniques with exposure to setting direction, map reading, problem-solving, presenting briefs and using effective writing skills. Students will explore dimensions of leadership attributes and core leader competencies in the context of practical, hands-on, and interactive exercises. Considerable attention is also placed on improving physical fitness. Includes a leadership lab and physical training. One to three lecture(s). One hour laboratory. Two to three hours credit.

AMR 2113 — Individual Leadership Studies Lecture and Lab.
Developing effective military leadership skills: problem analysis, decision making, planning and organizing, delegation and control, and interpersonal conflict resolution. Includes a leadership lab and physical training. Two lectures. Two hours laboratory. Three hours credit.

AMR 2123 — Leadership and Teamwork.
An application of leadership skills with an emphasis on: beliefs, values, ethics, counseling techniques, map reading, land navigation, basic first aid, and group interaction. Includes a leadership lab and physical training. Two lectures. Two hours laboratory. Three hours credit.

ART

ART 1113 — Art Appreciation.
A course designed to provide an understanding and appreciation of the visual arts. 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. Students will apply overlapping foreshortening and diminished scale. Black and white media will be stressed. 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 mixed 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. Main topics include current business and economic environment, entrepreneurship, marketing, management, financial management, and business careers. Three lectures. Three hours credit

BAD 1121 - Business Seminar I.
This course is designed to coordinate the various business-related student activities to the local level. It promotes leadership and professionalism in civic and social functions which include student participation and guest speakers. One lecture. One hour credit.

BAD 1313 — Business Mathematics.
Emphasis is placed on the study of the fundamental processes, fractions, decimals, percentage, and problem solving. The application of these fundamental processes is applied toward the problems of business which the student will encounter in the various commercial fields. Three lectures. Three hours credit

BAD 2213 — Introduction to Marketing.
This course is an introduction to the principles of marketing. Topics include history of marketing, the marketing process and the four P's. 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; discrete and continuous 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 — Introduction to Management. (This is considered an upper-level course at some universities and may not transfer).
This course is a study of basic management principles as applied to the functions of planning, organizing, directing, controlling, and coordinating with effective communication in business enterprise. Three lectures. Three hours credit.

BAD 2523 - Personal Financial Management.
This course deals with an individual's optimal management of personal income and expenditures over a lifetime to best meet the needs of his/her financial objectives. The course focuses on the areas of budgeting, insurance, borrowing and credit purchases, home ownership, investment, taxes, and family financial planning. Three lectures. Three hours credit.

BAD 2533 –– Computer Applications in Business & Industry (Prerequisite: Keyboarding Skills).
This course is an introduction to business application software. 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 2813 –– Administrative Communications (Prerequisite: ENG 1113).

A study of effective principles and practices of written and oral communications, emphasizing a managerial approach for business and the individual. Three lectures. Three credit hours.

BAD 2853 –– Business Ethics.

This course is a 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.

A combined lecture and laboratory course for non-science majors that provides an introduction to the basic principles of modern biology, and their relevance to modern life. Emphasis is placed on the nature and history of scientific thought, basic biological chemistry, cell structure and processes, genetics. 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 1124 — Principles of Biology II.

A combined lecture and laboratory course for non-science majors that emphasizes the survey of the diversity of life, ecology, evolution, and an overview of organ 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 1134 — General Biology I (Prerequisite: MAT 0124 or higher or placement score for MAT 1233 or higher).

A combined lecture and laboratory course for science majors that includes study of the scientific method, chemistry relevant to biological systems, cell structure and function, cell processes including photosynthesis and cellular respiration, cell division, genetics, and molecular genetics. 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 1144 — General Biology II (Prerequisite: BIO 1134).

A combined lecture and laboratory course for science majors that reinforces concepts introduced in BIO 1134-General Biology I, while emphasizing the diversity of life. Topics covered include evolution, classification, ecology, detailed consideration of each group of organisms and viruses, study of animals and plants including their basic anatomy and physiology. The lab reinforces the principles introduced in the lecture classes. Three lectures. Two hours laboratory. Four hours credit.

BIO 1534 —Survey of Anatomy & Physiology.

A combined lecture and laboratory course covering essential principles of human anatomy and physiology including basic chemistry, cell and tissue studies, and an overview of all the body 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 1613 — Nutrition (Prerequisite: MAT 0124 or higher or placement score for MAT 1233 or higher).

A lecture course covering the nutrients required for normal growth and prevention of major chronic diseases, and applied to the selection of food for ingestion, the metabolic process of digestion, assimilation, and absorption, and their applications for healthcare providers. Three lectures. Three hours credit.

BIO 2414 — Zoology I (Prerequisite: MAT 0124 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 that 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 vertebrate taxonomy 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: ACT Composite of 18 or BIO 1134).

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 the human endocrine, cardiovascular, lymphatic & immune, 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 comprehensive study of microorganisms to include microbial taxonomy, metabolism, physiology and genetics, concepts of pathogenesis and immunity and other selected applied areas. Labs in this course provide experiments that reinforce principles introduced in the lecture to include fundamental laboratory techniques in lab safety, microscopy, culturing and identification of microbes, and effectiveness of antimicrobial agents. Three lectures. Two hours laboratory. Four hours credit.

BUSINESS & OFFICE ADMINISTRATION

BOA 1413 —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 writing. Three lectures. Three hours credit.

BOA 2533 — Word Processing.
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. Three lectures. Three hours credit.

BOA 2553— Desktop Publishing.
This course will present 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. 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 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).

A laboratory course that contains experiments and exercises that reinforce the principles introduced in CHE 1213-General Chemistry I (Lecture). Must be taken concurrently in phase with the lecture sequence or after the lecture has been completed. Three hours laboratory. One hour credit.

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

A lecture course that covers the fundamental principles of chemistry and their applications. Chemical nomenclature, chemical reactions, stoichiometry, atomic structure, bonding theories, energy, periodic properties, and gas laws are among the topics discussed in depth. Three lectures. Three hours credit.

CHE 1221 — General Chemistry Laboratory II (Prerequisite: CHE 1211 & 1213. Co/Prerequisite: CHE 1223).

A laboratory course that contains experiments and excercises that reinforce the principles introduced in CHE 1223-General Chemistry II (Lecture). 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 lecture course that covers solutions, kinetics, equilibria, thermodynamics, acid-base chemistry, 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, reaction mechanisms, and spectroscopy. 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 combined lecture and laboratory course that covers spectroscopy, aromatic compounds, carbonyl compounds and other complex compounds, with emphasis on reactions and their mechanisms. 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.
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 0124 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. Two lectures. Two hours laboratory. 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; 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 1353 - Practicum in Criminal Justice (Prerequisite: CRJ 1313).
Practicum in an approved criminal justice agency under supervision of the agency concerned and the college instructor. A written evaluation is required of the agency. 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 1373 - Introduction to Homeland Security.
The issues pertaining to the role and mission of the Department of Homeland Security and related agencies, both domestic and international. 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.
Principles of investigation, search and recording, collection and preservation of evidence, finger printing, photography, sources of information, interviews, interrogation, and investigative problems in major crimes. Three lectures. Three hours credit.

CRJ 2393 – Survey of Criminalistics.
The study of scientific crime detention methods; modus operandi, crime scene search, preservation of evidence, research projects and class participation required. Three lectures. Three hours credit.

CRJ 2413 –Administration of Criminal Justice.
A study of the legal concepts and procedures, including laws of arrest and search warrant procedures, beginning with the issuance of legal process to ultimate disposition, including information, indictments, arraignments, preliminary hearings, bail, juries and trial and penal conditions. Three lectures. Three hours credit.

CRJ 2513 –Juvenile Justice.
Organization, functions, and jurisdiction of juvenile agencies. Processing, detention, and disposition of cases. Statutes and court procedures applied to juveniles. Three lectures. Three hours credit.

CRJ 2713 - Foundations of Terrorism.
Survey of the role of the criminal justice professional in combating terrorism in the modern world. Three lectures. Three hours credit.

CRJ 2723 - Intelligence Analysis and Security Management.
This course is designed to develop an understanding of how intelligence assists in maintaining national security, the laws, guidelines, executive directives and oversight relating to intelligence as well as the methodologies used in the intelligence community. Three lectures. Three hours credit.

CRJ 2733 - Transportation and Border Security.
This course provides a student with an analysis of issues that concern the protection of the borders of the United States and U. S. policies regarding the safety of the U. S. Transportation System. Three lectures. Three hours credit.

ECONOMICS

ECO 2113 — Principles of Macroeconomics. (Prerequisite: MAT 0124 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, and circular flow of market economies. Three lectures. Three hours credit.

ECO 2123 — Principles of Microeconomics. (Prerequisite: MAT 0124 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

EDUCATION

EDU 0113 — Praxis Core Academic Skills for Educators.

Review of basic skills in reading, writing, and mathematics required on the PRAXIS I examination. Includes completion of practice examination and attendance at Future Educators meetings. Three lectures. Three hours institutional credit. (Not designed to transfer)

EDU 1613 — Foundations in Education (Prerequisite: ENG 1113).

Survey of the history and philosophies of American education with special emphasis on current issues and problems in education. Includes a minimum of 30 hours field experience. Three lectures. Three hours credit.

ENGINEERING

EGR 1113 — Introduction to Engineering.

This course is designed to provide students with an introduction to engineering as a profession. Students will be familiarized with the various career pathways in engineering as well as planning for success in their chosen field. Three lectures. Three hours credit.

EGR 2413 — Engineering Mechanics I (Statics) (Pre/Co-requisite: PHY 2514).

A lecture course covering the equilibrium of point objects and extended objects in two and three dimensions using vector algebra. Also discussed are distributed forces, structures, friction, and moments of inertia in two and three dimensions. Three lectures. Three hours credit.

EGR 2433 — Engineering Mechanics II (Prerequisite: EGR 2413).

A lecture course that covers kinematics of particles and rigid bodies, kinetics of particles and rigid bodies using force-mass-acceleration, energy, and momentum methods. Three lectures. Three hours credit.

ENGLISH

ENG 0114 — Beginning English and Reading (Prerequisite: Appropriate placement score).

An integrated course designed to develop basic writing skills and reading strategies. Institutional credit only. Four lectures. Four hours credit. (Not designed to transfer).

ENG 0124 — Intermediate English and Reading (Prerequisite: ENG 0114 with C or appropriate placement score).

An integrated course designed to advance students to college level writing skills and reading strategies. Institutional credit only. Four lectures. Four hours credit. (Not designed to transfer).

ENG 1113 — English Composition I (Prerequisite: ENG 0124 with C or appropriate placement score).

Prepares the student to think critically and compose texts for academic and professional rhetorical situations. Three lectures. Three hours credit.

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

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

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

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

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

A continuation of reading and writing poetry, short fiction, creative nonfiction, and/or 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 to the present. Three lectures. Three hours credit

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

Surveys texts representative of global and historical diversity from the ancient world through the early modern world. Three lectures. Three hours credit.

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

Surveys texts representative of global and historical diversity from the Enlightenment Period to the present. Three lectures. Three hours credit.

ENG 2513 — Survey of African-American Literature (Prerequisite: ENG 1113 or ACT English Subscore of 23 or higher).

Surveys literature of major African-American writers from its Vernacular Tradition to the present. 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. Three lectures. Three hours credit.

GEOGRAPHY

GEO 1113 — World Regional Geography.
A regional survey of the basic geographic features and major new developments of the nations of the world. Three lectures. Three hours credit.

GRAPHICS AND DRAWING

GRA 1143 — Graphic Communication I (Corequisite: MAT 1233).
Fundamentals and principles of drafting to provide the basic background needed for all other drafting courses to include instrumental drawing, geometric construction, orthographic projection, descriptive geometry/auxiliary drawings, and computer-aided design (CAD) in 2-dimensional and 3-dimensional construction. Two lectures. Two hours laboratory. Three hours credit.

HISTORY

HIS 1113 — Western Civilization I.
This is a general survey of Western Civilization from ancient times to the mid-seventeenth century. Three lectures. Three hours credit.

HIS 1123 — Western Civilization II.
This is a general survey of Western Civilization since the seventeenth century. Three lectures. Three hours credit.

HIS 1163 –– World Civilizations I.
This is a general survey of world history from ancient times to the 1500s. Three lectures. Three hours credit.

HIS 1173 –– World Civilizations II.
This is 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 to 1877. Three lectures. Three hours credit.

HIS 2223 — American (U.S.) History II.
This is a survey of American (US) history since 1877. 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 recreation by developing body skills. Credit for this activity will be given to cheerleaders, dance teams, and other varsity support groups. 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, 1521 — Team Sports I, II.
This course focuses on rules, techniques, and participation in various HCC sports/cheer teams. Two classes. One hour credit.

HPR 1531, 1541, 2531, 2541 — Individual and Dual Sports I, II, III, IV.
This course focuses on techniques, and participation in tennis, archery, markmanship, or martial arts. Two classes. One hour credit.

HPR 1551, 1561, 2551, 2561 — Fitness and Conditioning Training I, II, III, IV.
Instruction and practice of basic principles of fitness and conditioning through a variety of exercises and activities. A student may earn four hours of credit toward graduation from the HPR 1551 series, and each course level may be taken multiple times. Two classes. One hour credit.

HPR 1613— Physical Education in the Elementary School.
This is a study of the growth and development of children including their interests and tendencies. Educational and physical education philosophy and objectives are stressed, as well as methods of teaching. Emphasis is placed on a conceptual approach based on mechanical laws and related concepts which results in a program of physical education presented in sequential progressive problem-solving situations. Theory and laboratory. Three lectures. Three hours credit.

HPR 2213 — First Aid and CPR.
Instruction and practice in methods prescribed in the American Red Cross or American Heart Association standard and advanced courses. A non-refundable fee to cover the cost of the Certification Card is charged for this class. 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 242(2-3) — Football Theory.
Theoretical study of football methods from an offensive and defensive standpoint including the fundamentals of blocking, passing, tackling, charging, punting, generalship, rules, and team play. Two-three lectures. Two-three hours credit.

HPR 243(2-3)— Basketball Theory
A theoretical study of basketball methods from an offensive and defensive standpoint, including the study of teaching the fundamentals and team organization. Two-three lectures. Two-three hours credit.

HPR 244(2-3) - Soccer Theory.
Explores the theories, practices, and strategies involved in coaching the game of soccer. Emphasis will be placed upon the objectives, rules, regulations, and policies of competitive athletics, as well as on individual skills, team tactics, organization and management practices pertaining to public school and intercollegiate soccer programs. Two-three lectures. Two-three hours credit.

HPR 245(2-3) — Baseball Theory.
A theoretical study of baseball methods from a coaching standpoint; study of fundamentals and team play; methods of teaching fundamentals; team organization. Two-three lectures. Two-three hours credit.

HPR 249(2-3)— Softball Theory.
Philosophies and methods of coaching, leadership, teaching techniques, team or organization, softball strategies, preparation for games, and preparation and care of softball fields. Two-three lectures. Two-three hours credit.

HPR 2723 — Prevention & Care of Athletic Injuries.
Theory and practice for the prospective athletic trainer or coach in the prevention and care of athletic injuries. Three lectures. Three hours credit.

HPR 2733 — Introduction to Athletic Training.

Introduction to the profession, including but not limited to procedural aspects of the athletic training room operations, role delineations, preparation and competencies with 100 observational/experience hours under a BOC certified athletic trainer. This course is recommended for Athletic Training majors. Three lectures. Three hours credit.

HONORS

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

Admission is by invitation only. Interdisciplinary studies of selected issues confronting the individual and society with discussions led by scholars, faculty, and/or students. One lecture. One hour credit.

HUMANITIES

HUM 1113 — Humanities I.

Provides an overview of history's most memorable achievements spanning the major world civilizations of Africa, the Americas, Asia, Europe, and the Middle East from the Prehistoric Era to the Renaissance. A global perspective is presented through a survey of history, literature, music, philosophy, and the visual arts. Three lectures. Three hours credit.

JOURNALISM

JOU 1111, 1121, 2111, 2121 — College Publications I.
(Yearbook (*Horizons*) or Newspaper (*The Growl*) I, II, III, IV).

A laboratory course designed to give practical experience in working with college newspaper and yearbook production. News, feature, and editorial writing, make-up and layout, editing, advertising and photography will be emphasized according to student need. Two hours laboratory. One hour credit.

LEADERSHIP

LEA 1811 — Leadership & Organization Skills I.
A study of leadership styles and skills, roles, and functions of officers of organizations. Includes parliamentary procedure, chain of command, communication, conducting effective meetings, the role of a constitution/by-laws, principles of ethics, etiquette, and working with volunteers. One lecture. One hour credit.

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

LEA 1911, 1921, 2911, 2921 — Leadership & Communication Skills Development-Recruiting 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.

LEA 2811 — Leadership & Organization Skills III.
Continued study of LEA 1811 & LEA 1821; Requires full participation in class; experiential roles chairing committees and events; lead decision making techniques; consensus, brain storming; observation and giving feedback to groups on role functions in the group; lead planning and goal setting groups; and presentation of leadership topics. One lecture. One hour credit.

LEA 2821 — Leadership & Organization Skills IV.
A continuation of activities and events of LEA 1811, LEA 1821, & LEA 2821, emphasizing servant leadership. 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 and gives the student guidance in collegiate life. Three lecture. Three hours credit.

LLS 1321 — Career Exploration.
This course is designed to assist students in determining career goals. Interest tests, personality inventories, and aptitude tests are given to help students determine career choices. One lecture. One hour credit.

LLS 1413 — Improvement of Study.
This course is designed to aid the student in study skills, promote student success in basic reading and note-taking techniques, critical thinking, time management, test-taking strategies, and listening and memory enhancement. Three lectures. Three hours credit.

LLS 1713 — Job Search Skills.
This course is designed to prepare students for job networking skills, completing applications, resume writing, interviewing, and job attitude. Three lectures. Three hours credit.

LIBRARY & SCIENCE

LIS 1111 — Library Science.
Introduction to the digital library. One lecture. One hour credit.

MATHEMATICS

MAT 0124 — Beginning Algebra (Prerequisite: Appropriate placement score for MAT 0124).
A course in algebra to include operations with real numbers, linear equations, the coordinate system, linear inequalities, laws of exponents, operations with polynomials, and factoring. Four hours lecture. Four hours institutional credit. (Not designed to transfer.)

MAT 1233 — Intermediate Algebra (Prerequisite: MAT 0124 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; laws of 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; rational, radical, and higher-order equations; 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 (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 or appropriate placement score for MAT 1323).

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 0124) with a C 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 with a C 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 — French I.
An oral-aural approach, stresses conversation, pronunciation, comprehension, reading, writing, and functional grammar with emphasis on the practical aspects of the language. Three lectures. Three hours credit.

MFL 1123 — French II (Prerequisite: MFL 1113).
Continues MFL 1113 with wider vocabulary and more complex structures and functions. Three lectures. Three hours credit.

MFL 1213 — Spanish I.
An oral-aural approach, stresses conversation, pronunciation, listening comprehension, reading, writing, and functional grammar with emphasis on communication. Three lectures. Three hours credit.

MFL 1223 — Spanish II (Prerequisite: MFL 1213).
Continues MFL 1213 with wider vocabulary and more complex structures and functions. Three lectures. Three hours credit.

MFL 2113 — French III (Prerequisite: MFL 1123).
Continues MFL 1123 with additional materials of literary and cultural value. Three lectures. Three hours credit.

MFL 2123 — French IV (Prerequisite: MFL 2113).
Continues MFL 2113 with additional literary and cultural readings and compositions as well as a review of essential elements of grammar. Three lectures. Three hours credit.

MFL 2213 — Spanish III (Prerequisite: MFL 1223).
Continues MFL 1223 with additional materials of literary and cultural value. Three lectures. Three hours credit.

MFL 2223 — Spanish IV (Prerequisite: MFL 2213).
Continues MFL 2213 with additional literary and cultural readings and compositions as well as a review of essential elements of grammar. Three lectures. Three hours credit.

MFL 2513 — Occupational Spanish.
This course is designed to teach basic oral communication skills for interaction in Spanish in an occupational setting. Specialized variations of this course include: Law Enforcement, Medical, and Business. Three lectures. Three hours credit.

MUSIC APPLIED

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

MUA 1141, 1151, 2141, 2151 — Elective Brass I, II, III, IV.
Brass instruction for non-brass/music education majors and non-music 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 and advanced non-music majors with an emphasis on brass instrumental playing. Designed to teach the fundamental principles of playing, explore moderate to advanced levels of literature, develop the student's interest in playing and strengthen the student's playing ability. One hour private instruction. Six hours practice. Two hours credit.

MUA 1241, 1251, 2241, 2251 — Elective Guitar I, II, III, IV.
Guitar instruction for non-music majors and music education majors who wish to take guitar as an elective. Introduction to guitar technique, repertoire, 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 for music education majors with guitar as their area of emphasis. Introduction to guitar technique, repertoire, and performance of standard literature. One hour private instruction. Six hours practice. Two hours credit.

MUA 1441, 1451, 2441, 2451 — Elective Percussion 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 majors and advanced non-music majors with an emphasis on percussion instrumental playing. Designed to teach the fundamental principles of playing, explore moderate to advanced levels of literature and develop the student's interest in playing. One hour private instruction. Six hours practice. Two hours credit.

MUA 1511, 1521, 2511, 2521 — Class Piano for Music Majors I, II, III, IV.
Class piano instruction for music majors with no previous piano training. This curriculum is designed to prepare students for their piano proficiency examination upon transfer to university. Lab-based instruction. One hour credit.

MUA 1541, 1551, 2541, 2551 — Piano for Non-Music Majors I, II, III, IV.
Individual piano instruction for non-music majors. One lesson. Three hours practice. One hour credit.

MUA 1572, 1582, 2572, 2582 — Piano for Keyboard Majors (Music Education) I, II, III, IV.
Individual piano instruction including technique, appropriate repertoire, and memorization. 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-Vocal Majors I, II, III, IV.
Voice for non-vocal 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 Vocal Music Education Majors I, II, III, IV.
Voice for vocal music majors is designed to teach the fundamental principles of singing, explore varied vocal literature, and develop and improve the student's vocal ability. One hour private instruction. Six hours practice. Two hours credit.

MUA 1841, 1851, 2841, 2851 — Elective Woodwinds 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 and advanced non-music 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 playing 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 1151, 1161, 2151, 2161 — Small Mixed Ensemble I, II, III, IV.
Designed to explore varied levels of literature and develop the student's knowledge of performance techniques in small ensembles and auxiliary groups. Two practice sessions. One hour credit.

MUO 1171, 1181, 2171, 2181 — Large Jazz Ensemble I, II, III, IV.
A course designed to give students the opportunity to perform jazz and a variety of music styles in a "big band" setting or similar instrumentation. Instructor permission required. 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 Voice Ensemble I, II, III, IV.
A course for select singers focused on performing from one or more genres of music. One practice session. One hour credit.

MUSIC FOUNDATIONS

MUS 1113 — Music Appreciation.
A course designed to give the student, through listening and written work, the ability to understand, appreciate, and evaluate music of Western Culture. Three lectures. Three hours credit.

MUS 1123 — Music Survey (Majors).
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 (Prerequisite: Music Placement Test II. A score of 0-49 will require students to enroll in both MUS 1133 - Fundamentals of Music and MUS 1214 - Music Theory I. A score of 50 or above will allow students to enroll in MUS 1214 - Music Theory I without 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: Music Placement Test II. A score of 0-49 will require students to enroll in both MUS 1133 - Fundamentals of Music and MUS 1214 - Music Theory I. A score of 50 or above will allow students to enroll in MUS 1214 - Music Theory I without Fundamentals of Music).

A minimum grade of "C" in each level of Theory is required 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, part writing, sight singing, and ear training. This course includes lab instruction in sight-singing, ear training, and dictation. Three lectures. Two hours laboratory. Four hours credit.

MUS 1413 — Basic Computer Skills for Musicians.

Designed to introduce students to the Macintosh Operating System. Students begin to work with MIDI, sequencing, software instruments, notation, CD creation, and basic editing tools in GarBnd. Three lectures. Three 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 2443 — Audio Engineering I.

Introduction to basic principles of sound theory, audio electronics, microphone characteristics and applications, mixers, signal routing and processing. Three lectures. Three hours 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 1116 — Nursing Theory I (Prerequisites: BIO 2514 & 2524, BIO 2924, & BIO 1613).

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, physical assessment, nursing process, as well as laboratory experiences and drug calculations. Correlates with NUR 1119. Five lectures. Three hours laboratory. Six hours credit.

NUR 1119 — Nursing I. (Prerequisites: BIO 2514 & 2524, BIO 2924, & BIO 1613).

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. This course will also review relevant content specific to the students' needs. One lecture. One hour credit.

NUR 1226 — Nursing II Theory (Prerequisite: NUR 1116 or 1119, ENG 1113, PSY 1513. Pre/Co-requisite: EPY/PSY 2533).

This course focuses on the utilization of the nursing process in the care of individuals and families across the lifespan in a variety of health care settings. Basic foundational Medical-Surgical concepts and competencies are introduced. Pharmacology content associated with the Medical-Surgical concepts will be introduced as well. Venipuncture, intravenous/blood therapy and administration and selected clinical experiences will be included. Five lectures. Three hours laboratory. Six hours credit.

NUR 1229 — Nursing II. (Prerequisite: NUR 1116 or 1119, ENG 1113, PSY 1513, Pre/Co-requisite: EPY/PSY 2533).

This course focuses on the utilization of the nursing process in the care of individuals and families across the lifespan in a variety of health care settings. Basic foundational Medical-Surgical concepts and competencies are introduced. Pharmacology content associated with the Medical-Surgical concepts will be introduced as well. Selected laboratory and clinical experiences will be included. The primary clinical focus will be in medical-surgical institutional settings with selected community-based pediatric, obstetric, psychiatric and/or geriatric patients. Six lectures. Nine hours laboratory. Nine hours credit.

NUR 1316 — Nursing Transitions I (Prerequisites: BIO 2514 & 2524, BIO 2924, BIO 1613, ENG 1113, PSY 1513, EPY/PSY 2533).

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 as well as fundamental skills in the areas of physical assessment, nursing process, and drug calculations. Five lectures. Three hours laboratory. Six hours credit.

NUR 1326 - Nursing Transitions II (Prerequisites: BIO 2514 & 2524, BIO 2924, BIO 1613, ENG 1113, PSY 1513, EPY/EPY 2533).

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 basic foundational Medical-Surgical concepts and competencies that are introduced in Nursing ii. Pharmacology content associated with the Medical-Surgical concepts will be introduced as well. Venipuncture, intravenous/blood therapy and administration, and selected clinical experiences will be included. Five lectures. Three hours laboratory. 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 2119 — Nursing III (Prerequisites: (NUR 1116 & 1226 or 1119 & 1229 or 1316 & 1326) & EPY/PSY 2533. Pre/Co-requisite Humanities or Fine Arts Elective.)

This course focuses on the utilization of the nursing process in the care of individuals and families across the lifespan in a variety of health care settings. Medical-Surgical concepts and competencies introduced in Nursing II are reinforced and applied as a building block for more complex content. Pharmacology content associated with the Medical-Surgical concepts will be taught as well. Selected laboratory and clinical experiences will be included. The primary clinical focus will be in adult medical-surgical institutional settings with more complex pediatric, obstetric, and psychiatric experiences when available. Six lectures. Nine hours laboratory. Nine hours credit.

NUR 2123 — Pharmacology (Prerequisite: NUR 1119)

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 and Humanities or Fine Arts Elective; Co-requisite: NUR 2243).

This course focuses on the utilization of the nursing process in the care of individuals and families across the lifespan in a variety of health care settings. Medical-Surgical and Psychiatric concepts and competencies in Nursing III are reinforced and applied with more complexity. Pharmacology content associated with these concepts will be taught as well. Selected laboratory and clinical experiences will be included. The primary clinical focus will be in adult medical-surgical and psychiatric institutional settings with emphasis on more complex and critically ill populations. Leadership and management skills will also be integrated into nursing care experiences. Five lectures. Twelve hours laboratory. Nine hours credit.

NUR 2243 — Management of Nursing Care (Prerequisite: NUR 2119 and Humanities or Fine Arts Elective; Co-requisite: NUR 2239).

This course is designed to integrate basic principles of management and leadership in patient care settings to assist the student in functioning as an associate degree nurse. Emphasis will be placed on NCLEX preparation to assist the student in being successful in obtaining licensure as a registered nurse. Concepts of professionalism and personal growth will also be emphasized with assigned projects and community service hours obtained throughout the program. Three lectures. Three hours.

PHILOSOPHY AND BIBLE

PHI 1113 — Old Testament Survey.
The student will survey the Old Testament (Hebrew Bible) 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 1st 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 moral philosophy with the investigation of selected moral problems. Three lectures. Three hours credit.

PHI 2613 – World Religions I.
An introduction to 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 — Introduction to 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 States and Local Government. Three lectures. Three hours credit.

PSC 2113 — Comparative Government.
A survey of various governmental systems beyond the United States. 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.

PSY 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.

PSY 2523 — Adolescent Psychology.
A study of human growth and development during adolescence. This includes physical, cognitive and psychosocial development. Three lectures. Three hours credit.

PSY 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. 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 theoretical analysis, nature, scope, and effects of contemporary social problems and policy measures used to address them. Three lectures. Three hours credit.

SOC 2143 — Marriage and Family.
A study of the development of marriage and family as cultural units in society. Three lectures. Three hours credit.

SOC 2213 — Introductory 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 I (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 effective speech preparation and delivery. Three lectures. Three hours credit.

SPT 1123 — Public Speaking II. (Prerequisite: SPT 1113).
A continuation in the study of public speaking with an emphasis on research, organization and delivery techniques. Three lectures. Three hours credit.

SPT 1131, 1141, 2111, 2121 — Forensics I, II, III, IV (Prerequisite: SPT 1113).
An activity course which includes: public speaking, oral interpretation and debate. Students participate in intercollegiate or community forensic contests and debate tournaments. One hour credit.

SPT 1153 - Voice, Diction, and Phonetics.
A study of the International Phonetic Alphabet and training in the phonetic transcription of speech for improvement of voice and diction. Includes physical characteristics and production of sounds in American English, auditory training, articulation and standard pronunciations, and voice production. Three lectures. Three hours credit.

SPT 1163 — Argumentation and Debate. (Prerequisite: SPT 1113).
The study and application of basic argumentative techniques; integration of speech techniques through class debates. 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 I.
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, 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 1273 — Theatrical Makeup.
Techniques in the application of makeup for the stage. Three lectures. Three hours 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, starting, 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 the components of the vehicle electrical system including gauges, driver information systems, horn, wiper/washer systems, and accessories. Two lectures. Four hours laboratory. Four hours credit.

ATT 1214 — Brakes.
This is a course designed to provide advanced skills and knowledge related to the repair and maintenance of brake systems on automobiles. It includes instruction and practice in diagnosis of braking systems problems and the repair of brake systems. Two lectures. Four hours laboratory. Four hours credit.

ATT 1313 — Manual Drive Transmissions/Transaxles.
This is a course designed to provide advanced skills and knowledge related to the maintenance and repair of manual transmissions, transaxles and drive train components. It includes instruction in the diagnosis of drive train problems and the repair and maintenance of transmissions, transaxles, clutches, CV joints, differentials and other components. One lecture. Four hours laboratory. Three hours credit.

ATT 1424 — Engine Performance I.
This is a course designed to provide basic skills and knowledge related to the engine mechanicals, ignition system, fuel, air induction, exhaust systems, and emission systems. It includes instruction, diagnosis, and correction of problems associated with in these areas. Two hours lecture. Four hours lab. Four hours credit.

ATT 1715 — Engine Repair.
This is a course designed to provide advanced skills and knowledge related to the repair and rebuilding of automotive engines. It 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 hours lecture. Six hours lab. 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 2324 — Automatic Transmissions/Transaxles.
This is a course designed to provide advanced skills and knowledge related to the diagnosis of automatic transmissions and transaxles. This course includes instruction and practice of testing, inspecting, and repairing/replacing of these devices. Two lectures. Four hours laboratory. Four hours credit.

ATT 2334 — Steering and Suspension Systems.
This is a course designed to provide advanced skills and knowledge related to the inspection and repair of steering and suspension systems on automobiles. This course includes instruction and practice in the diagnosis of steering system problems and the repair/replacement of steering/suspension systems components. Two lectures. Four hours laboratory. Four hours credit.

ATT 2434 — Engine Performance II.
This is a course designed to provide intermediate skills and knowledge related to the ignition system, fuel, air induction, exhaust systems, and emission 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 ignition system, fuel, air induction, exhaust systems, and emission systems. It includes instruction, diagnosis, and correction of problems associated with in these areas. Two hours lecture. Four hours lab. Four hours credit.

ATT 2614 — Heating and Air Conditioning.
This course is designed to provide advanced skills and knowledge associated with the maintenance and repair of automotive heating and air conditioning systems. It includes instruction and practice in the diagnosis and repair of heating and air conditioning system components, and control systems. Two hours lecture. Four hours lab. Four hours credit.

ATT 291(1-6) — Special Problem I in Automotive Technology.
A basic course to provide students with an opportunity to utilize basic skills and general knowledge gained in other Automotive Technology courses. The instructor and student work closely together to select a topic and establish criteria for completion of the project. Two-Twelve hours lab. One-Six hours credit.

ATT 292(1-6) — Supervised Work Experience in Automotive Technology.

A course that 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. Three-Eighteen hours externship. One -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. Two lectures. Two hours laboratory. 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. One lecture. 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 1163 - Information Management and Design - (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 introduces students to the word processing cycle and how word processing is used in the work place. This course is for anyone who needs to prepare their own business documents. Students will use the Microsoft Office Word application to create and edit business documents, enhance page layout, create tables, create reports, create columns, and create form letters and merge with a mailing list. Other topics covered include: styles, templates, mailing labels, drawing objects, graphics, and WordArt. After this course, the student would be prepared to take the Microsoft Office Certified Application Specialist Exam for Word. Two lectures. Two hours laboratory. Three hours credit.

BOT 1213 — Personal & 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: Appropriate placement score for MAT 0124).
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 (Prerequisite: Appropriate placement score for MAT 0124).
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 1453 - Introduction to Business Management.
Study of the basic principles and managerial functions of organizations management with special emphasis on planning, organizing, coordinating, commanding, and controlling. The importance of managing competitively and intelligently within a diverse environment is stressed. Situational cases are completed to reinforce decision-making in each of the function areas. The course will also consist of a series of 'mini' presentations related to each of the topics, delivered by different types of business managers and guest speakers**.** Three lectures. Three hours credit.

BOT 1473 - Introduction to Marketing.
This course surveys American and international marketing systems in the development, pricing, distribution, and promotion of products and services. Concepts, practices, and policies of manufacturers, wholesalers, and retailers are included. Current trends and developments in marketing practices are analyzed and strategic marketing ideas are implemented in group and individual cases. Three lectures. Three hours credit.

BOT 1493 - Social Media Management – (Prerequisite: BOT 1133 - Microcomputer Applications).

This course teaches students how to develop and maintain a social media presence in a personal and professional capacity. Students will engage in community and internet-based projects with special emphasis on blogs, wikis, social networking sites, photo-sharing sites, instant messaging, video-sharing sites, podcasts, widgets, virtual worlds, and more. Three lectures. Three hours credit.

BOT 1513 — Machine Transcription (Prerequisite: BOT 1113).

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 0114 or higher or appropriate placement score for ENG 0124 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 1763 - Communication Essentials - (Prerequisite: ENG 0114 or higher or appropriate placement score for ENG 0124 or higher).

This course focuses on the skills necessary to be successful and effective in the workplace. In addition to effectively contributing to a team while working with a diverse population, topics include: customer service and business etiquette, understanding human behavior, personal qualities of success, emotional intelligence, communication, workplace etiquette, conflict resolution, self-esteem, and goal setting. 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 2183 - Career Readiness.

This course is designed to prepare students for employment by teaching the importance of interviewing skills, employer expectations, employability skills, work ethics, and job retention skills. This course will also prepare students for the CPAS. Two lectures. Two hours Laboratory. Three hours credit.

BOT 2233 - Human Resource Management.

This course provides a general overview of the concepts and applications of the many parts of Human Resources (HR). Student will learn how the interdependence of the major topics in HR are created and implemented through the use of real world HR issues, community projects, and case studies. Three lectures. 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 income tax accounting. Three lectures. Three hours credit.

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

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

BOT 2523 — Medical Machine Transcription I (Prerequisites: BOT 1113, BOT 1513, BOT 1613, & BOT 1623).

This course is designed to teach transcription of various medical documents. Two lectures. Two 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. Two lectures. Two 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. Three lectures. 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 online 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.

BOT 2913––Entrepreneurship (Prerequisite: BOT 1493).

This introductory course provides students with a solid foundation of the vital role played by entrepreneurs and entrepreneurship in the 21st century global economy. The focus will be on the stages of development of the new venture including research, planning, feasibility analysis, capitalization and management. Students will learn how to use resources to start and operate a small business. The course blends theory with practice where students are challenged to apply principles, concepts, and frameworks to real world situations and community projects. Two lectures. Two hours laboratory. Three hours credit.

BOT 2923––BOT Externship and Seminar (Prerequisite: BOT 2183).

Students will serve as interns with local businesses and will be given meaningful projects, responsibilities, work deadlines, and expectations, very similar to what they would expect as a full-time employee. This capstone course can only be taken in the graduating semester. Two lectures. Two hours laboratory. Three 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 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 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 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 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.

IST 1124 – IT Foundations.

This course covers the diagnosis, troubleshooting, and maintenance of computer components and interpersonal communications for IT professionals. Topics include hardware compatibility, system architecture, memory, input devices, video displays, disk drives, modems, printers, safety and environmental issues, communication, and professional behavior. Two hours lecture. Four hours lab. Four hours credit

IST 1134 — 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.

IST 1143 – Security Principles and Policies.
This course is an introduction to the various technical and administrative aspects of information security and assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features. Two lectures. Two hours laboratory. Three hours credit.

IST 1154 – Web and Programming Concepts.
This course is an introduction to Web site development and programming logic. Students will gain hands-on experience in the development of computer programs. Upon completion of this course, students will be able to create a Web site and post it on the Internet. Two lectures. Four hours laboratory. Four hours credit.

IST 1163 – Concepts of Database Design.
This course is an introduction to the design and manipulation of relational databases. Emphasis is placed on creation, manipulation, extraction, and display of data from existing databases. QBE and SQL are explored. Two lectures. Two hours laboratory. Three hours credit.

IST 1213 – Client Installation and Configuration.
This course is designed to help the student install, support, and troubleshoot a current client operating system. Emphasis will be placed on common user operations as well as the network administrator's support of the client. Two lectures. Two hours laboratory. Three hours credit.

IST 1223 – Network Components (Prerequisite: IST 1134).
This course presents local area network and wide area network connectivity. It focuses on architectures, topologies, protocols, and transport methods of a network. Two lectures. Two hours laboratory. Three hours credit.

IST 1244 – Network Admin Using Microsoft Windows Server.
This course focuses on the management of a computer network using the Microsoft Windows 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.

IST 1254 – Network Administration Using Linux.
This course focuses on the management of a computer network using the Linux operating system. Emphasis is placed on installation, configuration, implementation, and administrative tasks of a functional server. Two lectures. Four hours laboratory. Four hours credit.

IST 1314 –Visual BASIC Programming Language.
This introduction to the Visual BASIC programming language introduces the student to object-oriented programming and a graphical integrated development environment. Two lectures. Four hours laboratory. Four hours credit.

IST 1324 – 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.

IST 1334 — COBOL Programming Language (Prerequisite: IST 1154 or Permission of Instructor)..
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.

IST 1513 – SQL Programming.
This course is the first of a two-part series that offers students an extensive introduction to data server technology, covering the concepts of both relational and object relational databases and the Structured Query Language (SQL). Students are taught to store, retrieve, and manipulate data. Two lectures. Two hours laboratory. Three hours credit.

IST 1523 – Advanced SQL Programming.
This course is the second of a two-part series that offers students an extensive introduction to data server technology. Students are taught advanced concepts of both relational and object relational databases and the Structured Query Language (SQL). Students are taught to create and maintain database objects and control user access. Two lectures. Two hours laboratory. Three hours credit.

IST 1714 – Java Programming Language.
This introduction to the Java Programming Language is to include sort, loops, arrays, and applets. Two lectures. Four hours laboratory. Four hours credit.

IST 2224 – Network Planning and Design (Prerequisite: IST 1223).
This course involves applying network concepts in planning and designing a functioning network. Emphasis is placed on recognizing the need for a network, conducting an analysis, and designing a solution. Two lectures. Four hours laboratory. Four hours credit.

IST 2234 – Network Implementation (Prerequisite: IST 2224).
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.

IST 2314 – 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.

IST 2324 – Script Programming (Prerequisite: IST 1154 or Permission of Instructor).
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.

IST 2334 – Advanced Visual BASIC Programming Language (Prerequisite: IST 1314).
This course is a continuation of the Visual BASIC programming language. Two lectures. Four hours laboratory. Four hours credit.

IST 2344 — Database Programming & Design.
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.

IST 2354 — Advanced RPG Programming Language (Prerequisite: IST 1324).
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.

IST 2364 — Advanced COBOL Programming Language (Prerequisite: IST 1334).
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.

IST 2374 – 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.

IST 2384 – Advanced C Programming Language (Prerequisite: IST 2374).

This course is a continuation of the study of the C programming language. Two lectures. Four hours laboratory. Four hours credit.

IST 2414 – Flash Game Programming (Prerequisite: IST 2334).

This course is an introduction to developing interactive web-based games using Flash and ActionScript programming. Upon completion of this course, students will be able to create a fully functional Flash game and post it to the web. Two lectures. Four hours laboratory. Four hours credit.

IST 2464 – PowerShell Programming.

This course is designed to introduce the student to the PowerShell command line language and its use in monitoring and maintaining Microsoft networks. The student will become familiar with the syntax of the command line language and its application in maintaining a modern network. Two lectures. Four hours laboratory. Four hours credit.

IST 2494 – iOS Application Development (Prerequisite: IST 2334).

This course is designed to introduce the student to creating interactive applications for iOS devices using Objective C and Cocoa with the Xcode editor. 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 and/or calculated results. Two lectures. Four hours laboratory. Four hours credit.

IST 292(1–3) Special Problem in Information Systems Technology (Prerequisite: To be taken during the semester the student is to complete the program).

This course provides students with an opportunity to utilize skills and knowledge gained in other Information Systems Technology courses. Two to 6-hours laboratory. One to 3 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 1213 — Collision Welding and Cutting.
A course to provide skill and practice in welding and cutting procedures that are used in the 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 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 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 1334 — Solid State Devices and Circuits (Pre-Corequisite: 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 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, date 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 or IMM 1814).

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 SCIENCES/PARAMEDIC

EMS 1118 — 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. Five hours lecture. Six hours laboratory. Three hours clinical. Eight hours credit.

EMS 1122 –– Introduction to EMS Systems.
This course introduces the student to the Emergency Medical Services EMS systems, roles, and responsibilities of the paramedic, well- being of the paramedic, illness and injury prevention, medical/legal issues, ethical issues, therapeutic communications, and life-span development. One hour lecture. Two hours laboratory. Two hours credit.

EMS 1314–– Airway: Management, Respiration, and Oxygenation (Pre/Corequisites: EMS 1122 & BIO 2524).
This course will provide the student with the essential knowledge to attain an airway and manage the respiratory system using advanced techniques. One hour lecture. Six hours laboratory. Four hours credit.

EMS 1414 –– Patient Assessment (Pre/Corequisite: EMS 1122 & BIO 2524).
This course will teach comprehensive history taking and physical exam techniques. One hour lecture. Six hours laboratory. Four hours credit.

EMS 1422 –– EMS Special Patient Populations (Prerequisites: EMS 1122, 1314, 1414, 1513, 1614, & BIO 2524).
This course will provide a comprehensive overview of providing care for the patient with special needs. One lecture hour. Two hours laboratory. Two hours credit.

EMS 1513 –– EMS Practicum I (Pre/Corequisites: EMS 1122, 1314, and 1415).
This course will provide clinical training on the skills and knowledge obtained in the classroom. This will be a supervised activity carried out in the clinical and field setting at approved sites. Nine hours clinical. Three hours credit.

EMS 1525 –– EMS Practicum II (Prerequisite: EMS 1513).
This course will provide clinical and field training on the skills and knowledge obtained in the classroom. This will be a supervised activity carried out in the clinical and field setting at approved sites. Nine hours clinical. Six hours field clinical. Five hours credit.

EMS 1614 –– Pharmacology (Pre/Co-requisites: EMS 1122 & BIO 2524).
This course will teach comprehensive pharmacodynamics and pharmacokinetics. Two hours lecture. Four hours laboratory. Four hours credit.

EMS 1825 –– Cardiology (Prerequisites: EMS 1122, 1314, 1414, 1513, 1614, & BIO 2524).
This class will teach a comprehensive approach to the care of patients with acute and complex cardiovascular compromise. Two hours lecture. Six hours laboratory. Five hours credit.

EMS 2414 –– Maternal/Child Emergencies (Prerequisite: EMS 1122, 1314, 1414, 1513, 1614, & BIO 2524).
This course will provide a detailed understanding of the anatomic structures, physiology, and pathophysiology encountered when providing care in gynecological and obstetrical emergencies as well as pediatric emergencies. Three hours lecture. Two hours laboratory. Four hours credit.

EMS 2565 –– EMS Practicum III (Prerequisites: EMS 1525).
This course will provide advanced clinical and field experiences in the skills and knowledge obtained in the classroom with an emphasis on leadership skills. These will be supervised activities carried out in the clinical and out-of-hospital field setting at approved sites with an approved preceptor. Nine hours clinical. Six hours field clinical. Five hours credit.

EMS 2618 –– Critical Care Paramedic I
This course provides a complex review of medical care, procedures, and practices common to critical care transport. The student will gain a comprehensive knowledge of all aspects of critical care transport including Medical Legal, Safety, Regulations, Airway, Cardiovascular, Neurological, GI/GU, Shock, and Pharmacology. Eight hours lecture. Eight hours credit.

EMS 2622 –– Critical Care Paramedic Lab (Pre- or Co-requisite: EMS 2618).
This course utilizes the didactic knowledge learned in Critical Care Paramedic I and teaches the student the skills specific to Critical Care Transport including Advanced Pharmacological Assisted Intubation, Surgical Airway Management, Ventilator Management, Chest Tube Placement and Management, Hemodynamic Monitoring, Arterial Line Insertion, and Hemodynamic Monitor. Four hours laboratory. Two hours credit.

EMS 2632 –– Critical Care Paramedic Practicum (Pre- or Co-requisite: EMS 2618 & 2622).

The Critical Care Practicum is designed as clinical-based education with an emphasis on competency-based performance. The student will complete clinical rotation in a variety of critical and emergency care units. Students will be required to complete a minimum of 90 hours of clinical rotations. However, students will be required to continue in the clinical setting until successfully performing the prescribed number of skills relative to critical care prior to completion of the course. Six hours clinical. Two hours credit.

*Clinical components should be completed at a medical center with a full line of services including but not limited to Emergency Medicine, Surgery, Interventional Cardiology, Cardiothoracic Surgery, Orthopedics, Critical Care Medicine, and Pediatrics. Not all services must be available at a single facility. Depending on the student's clinical background, clinical rotations may be fitted to meet the educational and competency needs of the individual.

EMS 2714 –– Trauma (Prerequisites: EMS 1122, 1314, 1414, 1513, 1614, & BIO 2524).

This course will provide advanced 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 laboratory. Four hours credit.

EMS 2855 –– Medical (Prerequisites: EMS 1122, 1314, 1414, 1513, 1614, & BIO 2524).

This course will provide a detailed understanding of the anatomic structures, physiology, and pathophysiology encountered when providing care in medical emergencies involving pulmonary, allergy and anaphylaxis, gastroenterology, renal urology, and hematology. Two hours lecture. Six hours laboratory. Five hours credit.

EMS 2912 –– EMS Operations (Prerequisites: EMS 1122, 1314, 1414, 1513, 1614, & BIO 2524).

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. Two hours laboratory. Two hours credit.

EMS 2924 –– Professional Development Seminar (Prerequisite: A student must be a nationally- registered paramedic, as well as a Mississippi-certified paramedic and be currently enrolled in the Associate of Applied Science Program.)

This course teaches the leadership skills necessary to manage complex situations including patient care, supervision, mentoring, and leading other personnel. One hour lecture. Six hours laboratory. Four hours credit.

EMS 2933 –– Cardiac Resuscitation Across the Life Span.

This course is a comprehensive review of cardiac resuscitation for healthcare professionals. The course provides a review of Basic Life Support for all age groups, advanced cardiac life support, and pediatric advanced life support. At the end of the course, licensed healthcare providers are eligible to receive Certification in BLS-Healthcare Provider, ACLS, and PALS for the American Heart Association. Three hours lecture. Three hours credit.

ENGINEERING TECHNOLOGY

ENT 1113 — Graphic Communications (Co-Prerequisite: ENT 1313).

This course is designed to give students fundamentals and principles of drafting to provide the basic background needed for all other engineering technology courses. Two hours lecture. Two hours lab. Three hours credit.

ENT 1123––Computational Methods for Drafting.

This course is designed to give the student a study of computational skills required for the development of accurate design and drafting methods. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 1133 — Technology Graphics (Prerequisite: GRA 1143 or ENT 1113).

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

ENT 1143 — Geometric Dimensioning and Tolerancing.

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 hours lectures. Two hours laboratory. Three hours credit.

ENT 1154 — Basic Applications of Industrial Safety.

This course introduces the concepts of health and safety in engineering technology related fields. It aims to make the students safety-conscious in relation to personal safety, accident prevention, and methods of compliance. Four hours lectures. Four hours credit.

ENT 1163 — Introduction to Industrial Engineering.

This course is designed to give the student an introduction to and an overview of the profession, including career planning and communication, ethics, teamwork and selected solution methods for problems in coordination and planning. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 1173 — Fundamentals of Management.
This course addresses organizational management and the dynamic role managers play in the success of businesses. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 1183 — Spreadsheet Applications (Co-Prerequisite: ENT 1313).
This course focuses on applications of the electronic spreadsheet as an aid to management decision making. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 1213 — Materials.
This course is designed to teach students physical properties of the materials generally used in the erection of a structure and the manufacture of products, with a brief description of their manufacture. Two hours lecture. Two hours lab. Three hours credit.

ENT 1223 — Industrial Power Tools Applications.
This course is designed to teach students the safe and proper use of various hand and stationary power tools. This course includes instruction in the use of hand power tools, bench grinders, table saws, planer, cut-off saws, and drill presses. Two lectures. Two hours lab. Three hours credit.

ENT 1233 – Plans and Document Interpretation.
Graphic techniques used in the construction industry. This course included computations of areas and volumes, interpretations of constructions plans and specifications and symbols and plans used in the residential, commercial, and heavy-duty construction industry. Three hours lectures. Three hours credit.

ENT 1243 — Building Codes & Construction Documents.
Introduction to building code compliance, the role of inspection in building construction, and overview of construction contracts and specifications. Three lectures. Three hours credit.

ENT 1313 — Principles of CAD.
This course is designed to teach students the basic operating system and drafting skills. Two hours lecture. Two hours lab. Three hours credit.

ENT 1323 — Intermediate CAD.
This course is designed to give the student continuation of Principles of CAD (ENT 1313). Subject areas include dimensioning, file manipulation, symbols and 3-D wireframe and solid modeling. Two hours lecture. Two hours lab. Three hours credit.

ENT 1413 — Elementary Surveying (Prerequisite: ENT 1313).
This course is designed to give the student a basic course regarding the principles and practices of plane surveying, including measurements for distance, direction and elevation including an introduction to the care and use of surveying instruments and equipment. Two hours lecture. Two hours lab. Three hours credit.

ENT 1513 — Principles of Design.
This course is designed as an introduction to the field of interior design with emphasis on processes and resources of the designer. 3 hours lecture. 3 hours credit.

ENT 1523 — Landscape Design (Prerequisite: ENT 1313).
This course is designed to give the student computer-aided design drafting for civil engineering, surveying and land development technicians. Industry standard civil engineering software program will be utilized in this course. Creation of grading and drainage plans, digital terrain models, underground utilities and engineering details. Two hours lecture. Two hours lab. Three hours credit.

ENT 1533 — Blueprint Reading.
This course is designed to give the student terms and definitions used in reading blueprints. Basic sketching, drawing, and dimensioning of objects will be covered. Two hours lecture. Two hours lab. Three hours credit.

ENT 159(1-3) — Internship/Special Project in Design (Pre-requisite: successful completion of the core technical courses.)
This course is designed for the student to use the skills and knowledge gained in other design courses. It is a cooperative program between industry and education designed to integrate the student's technical studies with industry experience. Variable credit is awarded on the basis of one credit hour per 45 industry contact hours. One - three hours credit.

ENT 1613 — Architectural Design I (Prerequisite: ENT 1313).
This course is a study in development of architectural design principles for a residential structure. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 1713 — Fundamentals of Machine Processes.
This course is designed to give the student basic machining equipment and safety procedures. Emphasis is placed on measurement techniques, machine technology, machine tools, and applications. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 1814 — Basic Electricity & Electronics.
Study of fundamental industrial electrical and electronic principles with experimentation and project construction. Two lectures. Four hours laboratory. Four hours credit.

ENT 1823 — Design for Manufacturing (Prerequisite: ENT 1113).
This course is designed to offer instruction in various methods of manufacturing with emphasis on the drafter's role in manufacturing. Two hours lecture. Two hours lab. Three hours credit.

ENT 1833 — Manufacturing Processes.
This course is designed to give the student a study of modern manufacturing processes with an emphasis on flexible manufacturing and computer integrated manufacturing. Two hours lecture. Two hours lab. Three hours credit.

ENT 2133 –– Professional Development (Prerequisite: ENT 1413).
This course emphasizes an awareness of interpersonal skills essential for job success. Two hours lecture. Two hours lab. Three hours credit.

ENT 2153 –– Civil Drafting (Prerequisite: ENT 1413).
This course is designed to give the student an introduction to computer-aided design/drafting software for civil, surveying, and land development disciplines. Topics include mapping scales and symbols, civil fundamentals, location and direction of property lines, topographic mapping, and boundary and legal description plats. Two hours lecture. Two hours lab. Three hours credit.

ENT 2233 –– Structural Drafting.
This course is designed to teach students structural section, terms, and conventional abbreviations and symbols used by structural fabricators and erectors are studied. Knowledge is gained in the use of the A.I.S.C. Handbook. Problems are studied that involve structural designing and drawing of beams, columns, connections, trusses, and bracing (steel, concrete, and wood). Two hours lecture. Two hours lab. Three hours credit.

ENT 2243 — Cost Estimating (Prerequisite: ENT 1183).
This course is designed to give the student preparation of material and labor quantity surveys from actual working drawings and specifications. Two hours lecture. Two hours lab. 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.
This course focuses on the application of statistics and probability theory in quality assurance programs. Various product-sampling plans as well as the development of product charts for defective units will be studied. Two hours lecture. Two hours lab. Three hours credit.

ENT 2273 — Facilities Planning (Co-Prerequisite: ENT 1814).
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 3-D design and computer simulation. Two lectures. Two hours laboratory. Three hours credit

ENT 2323 — Industrial Welding & Metals.
This course is designed to give the student instruction in different metals and their properties using basic SMAW welding and oxy-fuel cutting and brazing. Two lectures. Two labs. Three hours credit.

ENT 2343 — Advanced CAD (Prerequisite: ENT 1313).
A continuation of Intermediate CAD. Emphasis is placed on the user coordinate system and 3D modeling. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 2353 — B.I.M./Parametric Modeling.
This course is designed to give the student a continuation of CAD. Emphasis is placed on the managing Building Information Model. Two hours lecture. Two hours lab. Three hours credit.

ENT 2363 — Computer Numerical Control (Prerequisite: ENT 1313).
A course designed to introduce the students to the basics of computer numerical control machines. Two hours lecture. Two hours laboratory. Three 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. Two hours lecture. Two hours laboratory. 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. Three hours lecture. Three hours credit.

ENT 2453––Energy Systems.
This course covers an overview of the past, present, and future of energy systems and the technologies they employ. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 2463 – Grading & Drainage (Prerequisite ENT 2153).

This course is designed to give the student computer aided design drafting for civil engineering, surveying and land development technicians. Industry standing civil engineering software program will be utilized in this course. Creation of grading and drainage plans, digital terrain models, underground utilities and engineering details. Two hours lecture. Two hours lab. Three hours credit.

ENT 2513 – Visual Communications in Design. (Co-requisite: ENT 1113)

This course is designed as an introduction to visual communications in interior design with emphasis on orthographic and free-hand drawing and visual design terminology. 2 hours lecture. 2 hours laboratory. 3 hours credit.

ENT 2523 – Intermediate Design (Prerequisite ENT 1513).

This course is a studio course for the exploration and application of design methodology to interior environments. 2 hours lecture. 2 hours laboratory. 3 hours credit.

ENT 2533 – Design Materials and Installation Methods

This course is a study of architectural materials for interiors with an emphasis on selection, cost, installation, construction supervision and code/standards requirements. 3 hours lecture. 3 hours credit.

ENT 2543 – Visual Literacy in Design

This course is an exploration of various communication methods in interior design through a variety of projects. 2 hours lecture. 2 hours laboratory. 3 hours credit.

ENT 2563 – Advanced Visual Literacy in Design (Prerequisite ENT 2543)

This course is an exploration of advanced graphic communication and modeling methods in interior design through a variety of projects. 2 hours lecture. 2 hours laboratory. 3 hours credit.

ENT 2572 – Portfolio Development

This course is an introduction to various portfolio techniques, documentation methods and career planning for the interior design profession. 2 hours lecture. 2 hours credit.

ENT 2613 — Programmable Logic Controllers (Co-Prerequisite: ENT 1113).

This course covers the use of programmable logic controllers (PLCs) in a modern industrial setting, as well as the operating principles of PLCs. Discussion and practice in the programming, installation, and maintenance of PLCs. Two hours lecture. Two hours lab. Three hours credit.

ENT 2623 — Architectural Design II (Prerequisite: ENT 1613).
This course is designed to emphasize 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. Two hours lecture. Two hours laboratory. Three hours credit.

ENT 2643 — Architectural Rendering (Prerequisite: ENT 1113).
This course is designed to give the student visual expression of architectural principles and structures. This course will include perspective, shade, shadow, and color using pencil, pen & ink, paint and new media. Two hours lectures. Two hours laboratory. Three hours credit.

ENT 2713 — Architectural History.
This course is designed to give the student analysis of achievements in the design and construction of major architectural developments from early times to present. Two lectures. Two hours laboratory. Three hours credit.

ENT 2723 — Digital Studio (Prerequisite: ENT 1113).
This course is designed to give the student a general overview of current issues in digital media; a study of how digital media can assist in the work environment; provides a basis for further study in graphic design and production. Two hours lecture. Two hours lab. Three hours credit.

ENT 291(1-3) — Special Project (Prerequisite: Consent of Instructor).
This course is designed to give the student practical application of skills and knowledge gained in other drafting courses. The instructor works closely with the student to ensure that the selection of a project will enhance the student's learning experience. Two to six hours lab. 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. Two hours lecture. Two hours laboratory. Three hours credit.

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 its 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 mensurements. 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. Three lectures. 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 2914 — Special Problem 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. Eight hours laboratory. Four 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 & FST 1214. Pre/Co-requisite FST 1224).
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.
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 (Prerequisites: FST 1214 & FST 1113. Co-requisite: 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 (Prerequisite: FST 1214. Pre/Co-requisites: 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 2323 — Funeral Merchandising and Management.

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 (Prerequisite: FST 1113. Pre/Co-requisite: 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 2812 — Comprehensive Review (Prerequisite: To be taken during the final semester of course work. Student must have a GPA of 2.0 or higher).

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. Two lectures. Two hours credit.

HEATING, VENTILATION, AC, & REFRIGERATION. TECHNOLOGY

ACT 1003— Introduction to Heating & Air Conditioning Technology.
This course is designed to introduce students to the fundamental skills associated with all HVAC courses. Safety, basic tools, special tools, and equipment, communication skills, employability skills, and materials handling topics are included. Two hours lecture. Two hours lab. Three hours credit.

ACT 1124— Basic Compression Refrigeration.
This course includes an introduction to the field of refrigeration and air-conditioning. Emphasis is placed on trade math, thermodynamics and heat transfer. Two hours lecture. Four hours lab. Four hours credit.

ACT 1133 — Brazing and Piping.
This course includes various tools and pipe connecting techniques. This course includes specialized tools and test equipment required in heating, ventilation, air-conditioning, and refrigeration. Two hours lecture. Two hours lab. Three hours credit.

ACT 1214 — Controls.
This course includes fundamentals of gas, fluid, electrical, and programmable controls. Two hours lecture. Four hours lab. Four hours credit.

ACT 1313 — Refrigeration System Components.
This course includes an in-depth study of the components and accessories of a sealed system including metering devices, evaporators, compressors, and condensers. Two hours lecture. Two hours lab. Three hours credit.

ACT 1713 — Electricity for Heating, Ventilation, Air Conditioning, and Refrigeration I.
This course includes basic knowledge of electricity, power distribution, components, solid state devices, and electrical circuits. Two hours lecture. Two hours lab. 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 hours lecture. Two hours lab. Three hours credit.

ACT 2324 — Commercial Refrigeration.
This course includes a study of various commercial refrigeration systems. It includes installation, servicing, and maintaining systems. Two hours lecture. Four hours lab. Four hours credit.

ACT 2414 — Heating, Ventilation, Air Conditioning, and Refrigeration I.

This course includes residential air-conditioning including indoor air quality. This course includes modules on basic maintenance, air quality equipment, troubleshooting cooling, and troubleshooting gas heating. Two hours lecture. Four hours lab. Four hours credit.

ACT 2424 — Heating, Ventilation, Air Conditioning, and Refrigeration II.

This course includes a continuation of Heating, Ventilation, and Air Conditioning I with modules related to introduction to hydronic systems, troubleshooting heat pumps, and troubleshooting accessories. Two hours lecture. Four hours lab. Four hours credit.

ACT 2433 — Refrigerant, Retrofit, & Regulation.

This course includes regulations and standards for new retrofit and government regulations. This course includes EPA regulations, local, and state codes. Two hours lecture. Two hours lab. Three hours credit.

ACT 2513 — Heating Systems.

This course includes various types of residential and commercial heating systems. This course includes gas, oil, electric, compression, and hydronic heating systems. Two hours lecture. Two hours lab. Three hours credit.

ACT 2624 — Heat Load Air Properties.

This course includes introduction to heat load calculations for residential and light commercial heating, ventilation, air-conditioning, and refrigeration systems. This course includes air distribution, duct sizing, selection of grills and registers, types of fans, air velocity, and fan performance. This course introduces air testing instruments and computer usage. Two hours lecture. Four hours lab. Four hours credit.

ACT 291(1-3) — Special Project in Heating, Ventilation, Air Conditioning, and Refrigeration.

This course is designed to provide the student with practical application of skills and knowledge gained in technical courses. The instructor works closely with the students 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, Ventilation, Air Conditioning, and Refrigeration.

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 1112––Industrial Maintenance Core & Safety.
This course includes basic safety, introduction to construction math, introduction to hand and power tools, blueprint drawings, and employability and communications. One lecture. Two hours laboratory. Two hours credit.

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 1143 — Commercial/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.

IMM 1153 — Electrical Industrial Maintenance I (Prerequisite: IMM 1113 or CTE 1143).
This course includes Industrial Safety, Introduction to the National Electric Code®, Electrical Theory, Alternating Current, E&I Test Equipment, and Flow, Pressure, Level, and Temperature. One lecture. Four hours laboratory. Three hours credit.

IMM 1163 — Electrical Industrial Maintenance II (Prerequisite: IMM 1153).
This course includes process mathematics, hand bending, tubing, clean purge, and test tubing and piping systems, instrument drawings and documents (part one), conductors and cables, and conductors terminations and splices. One lecture. Four hours laboratory. Three hours credit.

IMM 1213 - Industrial Hand Tools & Mechanical Components.
Safe and proper use of hand tools and mechanical components commonly used by industrial maintenance mechanics and technicians. Includes instruction in the selection, use, and care of common hand tools and in the identification and maintenance of mechanical components such as belts and pulleys, chains and sprockets, and bearings and seals used to transmit mechanical power. One lecture. Four hours laboratory. Three hours credit.

IMM 1214 - Introduction to Industrial Maintenance.
This course includes basic tools of the trade, fasteners and anchors, oxyfuel cutting, gaskets and packing, craft-related mathematics, construction drawings, pumps and drivers, introduction to valves and test equipment, material handling, mobile and support equipment, and lubrication. Two lectures. Four hours laboratory. Four hours credit

IMM 1223 — Power Tool Applications.
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 hour lecture. Four hours laboratory. Three hours credit.

IMM 1243 — Mechanical Industrial Maintenance I (Prerequisite: IMM 1113 or CTE 1143).
This course includes advanced trade math, precision measuring tools, installing bearings, and installing couplings. One lecture. Four hours laboratory. Three hours credit.

IMM 1253 — Mechanical Industrial Maintenance II (Prerequisite: IMM 1243).
This course includes advanced setting baseplates and prealignment, conventional alignment, installing belt and chain drives, and installing mechanical seals. One lecture. Four hours laboratory. Three 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 1323 — Motor Control Systems (Prerequisite: IMM 1153 or by permission of instructor).
This course includes the 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 hours lecture. Two hours lab. 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 1614— Principles of Piping & Hydro-Testing.

Instruction on basic principles of piping and pipe fitting, basic pipe fitting procedures, and basic hydro-testing of pipe systems. 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 1814 — 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. Two lectures. Four hours laboratory. Four 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.

IMM 1933 — Manufacturing Skills.
This course is designed to provide the student with the basic skills needed to be successful in a high-performance manufacturing environment. The course covers the following topics critical to employment; basic computer literacy, safety and CPR, blueprint reading, precision measurement, and an introduction to manufacturing improvement methods such as Lean Manufacturing, Quick Changeover, 5S, teamwork and problem solving. Three lectures. Three hours credit.

IMM 2113 — Equipment Maintenance, Troubleshooting, & Repair.
Maintenance and troubleshooting techniques, use of technical manuals and test equipment, and inspection/evaluation/repair of equipment. One lecture. Four hours laboratory. Three hours credit.

IMM 2423 — Solid State Motor Control (Prerequisite: IMM 1323 & IMM 2613 or by permission of instructor).
This course includes principles and operation of solid state motor control. Additionally, the course includes the design, installation, and maintenance of different solid state devices for motor control. Two lectures. Two hours laboratory. Three hours credit.

IMM 2613 — Programmable Logic Controllers.
This course includes of programmable logic controllers (PLCs) in modern industrial settings. This course also includes the operating principles of PLCs and practice in the programming, installation, and maintenance of PLCs. Two lectures. Two hours laboratory. Three hours credit.

IMM 2623 — Advanced Programmable Logic Controllers (Prerequisite: IMM 2613 & IMM 1323 or by permission of instructor).
Advanced PLC course that provides instruction in the various operations, installations, and maintenance of electric motor controls. Also, information in such areas as sequencer, program control, introduction to function blocks, sequential function chart, introduction to HMI, and logical and conversion instructions. Two lectures. Two hours laboratory. Three hours credit.

MAINTENANCE TECHNOLOGY

ENT 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 devises 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 2413 - Automated Manufacturing Controls.
This course is designed to teach the students the integrated control systems found in automated systems. Emphasis will be placed on encoders, optical devices, servo motors, stepper motors, computerized numerical control (CNC), vision and sensing systems, lasers, programmatic controllers, motor speed controls, and other similar devices. Two lectures. Two hours laboratory. 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 markers. 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 transferal 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.

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 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 1243 — 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. Three lectures. Three 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: OTA 1433).
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 or 1243).
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.

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 hours lectures. Three hours credit.

LET 1713 — Legal Writing (Prerequisites: LET 1113 & 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 (Prerequisites: LET 1113 & 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. Three hours lectures. 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 hours 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. Three hours lectures. Three hours credit.

LET 2343 — Contracts.
This course provides instruction in the area of contract law, concentrating on the elements of a valid contract, various types of contracts, the Uniform Commercial Code, and ethical issues in contract law. Three hours lectures. Three hours credit.

LET 2353 — Criminal Law.
This course provides an overview of criminal law, and the procedures involved in the criminal process. The course focuses on the Mississippi court system, legal terminology involved in criminal practice, and on gathering information and evidence, and using ethical standards. Three hours lectures. Three hours credit.

LET 2453 — Real Property I.
This course is an introduction to real property law including ownership and transfer, employing ethics. Three hours 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. Three hours lecture. 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.
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. Three hours lecture. 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.

PHYSICAL THERAPY ASSISTANT

PTA 1123 - Fundamental Concepts of Physical Therapy

This course is an introduction to the field of physical therapy including role orientation, professional organizational structure, legal and ethical implications, and legislation. Historical patterns in the development of the profession will be explored and medical terminology introduced. Three lectures. Three hours credit.

PTA 1131 – PTA Practicum I.

This course is designed to provide the student with observational time with participation in selected physical therapy activities. Three hours clinical. One hour credit.

PTA 1213 - Fundamental Skills for Physical Therapist Assistants (Pre/corequisite: PTA 1123).

This course provides knowledge of topics utilized in the practice of physical therapy. Topics covered will include positioning, draping, transfers, body mechanics, gait training, and standard precautions. Vital signs, first aid, and emergency techniques will also be covered. Two lectures. Two hours laboratory. Three hours credit.

PTA 1223 - Therapeutic Modalities (Pre/corequisites: PTA 1123, 1213 & 1314).

This course is an introduction to the theory and practical application of hydrotherapy, thermotherapy, cryotherapy, light therapy, and mechanotherapy. Emphasis will be placed on the technique of application, indications, and contraindications of modalities. Two lectures. One hour laboratory. Three hours credit.

PTA 1314 – Kinesiology (Pre/corequisites: PTA 1123 & 1213).

This course studies individual muscles and muscle functions, biomechanical principles of joint motion, gait analysis, goniometry, and postural assessment. Three lectures. Two hours lab. Four hours credit.

PTA 1324 - Therapeutic Exercise and Rehabilitation I (Pre/corequisites: PTA 1123, 1213, 1223 & 1314).

This course provides an overview of the biochemical and neurophysiological basis and application of various therapeutic exercises. The basics of therapeutic exercise are correlated with specific conditions. This course focuses on rehabilitation techniques in the treatment of a variety of selected conditions. Specialized exercise procedures are emphasized. Three lectures. Two hours laboratory. Four hours credit.

PTA 1912 - Seminar I.

This course presents the opportunity for group assembly on a regular basis to work toward achievement of course objectives. Leadership skills, an understanding of group dynamics, community service, interaction with other health education students, and the practice of reading and interpreting professional literature are emphasized. A desire to continue development of knowledge and skills is stressed. Two hours lecture. Two hours credit.

PTA 1922 - Seminar II (Prerequisite: PTA 1123).

This course provides the opportunity for group assembly on a regular basis to work to achieve course objectives. Demonstration of leadership skills, an understanding of group dynamics, community service, interaction with other health education students, and the practice of reading and interpreting professional literature are further developed. A desire to continue development of knowledge and skills is emphasized. Two lectures. Two hours credit.

PTA 2234 – Electrotherapy (Prerequisites: PTA 1123, 1213 & 1314).

This course emphasizes theory and practical application of electrotherapy and other therapeutic procedures. Indications and contraindications of modalities are also discussed. Three lectures. Two hour laboratory. Four hours credit.

PTA 2334 - Therapeutic Exercise and Rehabilitation II (Pre/corequisites: PTA 1123, 1213, 1223, 1314, 1324 & 2413).

This course presents theory, principles, and techniques of therapeutic exercise and rehabilitation for primarily neurological conditions. Methods of functional, motor, and sensory assessment and intervention techniques are included. Principles of prosthetics and orthotics, functional training, and other techniques are covered. Three lectures. Two hours laboratory. Four hours credit.

PTA 2413 - Clinical Education I (Prerequisites: Core Physical Therapist Assistant Courses).

This course provides supervised clinical experiences in demonstrating the attributes and applying the skills for which students have been deemed competent for the clinical setting. Nine hours clinical. Three hours credit.

PTA 2423 - Clinical Education II (Prerequisites: Core Physical Therapist Assistant Courses).

This is the first of three culminating clinical education experiences (identified in a Normative Model of PTA Education as the first full-time clinical experience) that provide supervised clinical experiences in demonstrating the attributes and applying the skills that prepare students for entry into the physical therapy profession. Nine hours clinical. Three hours credit.

PTA 2433 - Clinical Education III (Prerequisites: Core Physical Therapist Assistant Courses).

This is the second of three culminating clinical education experiences that provide supervised clinical experiences in demonstrating the attributes and applying the skills that prepare students for entry into the Physical Therapy profession. Nine hours clinical. Three hours credit.

PTA 2443 - Clinical Education IV (Prerequisites: All Core Physical Therapist Assistant and Clinical Education Courses).

This is the third of three culminating clinical education experiences (identified in a Normative Model of PTA Education as the last full-time clinical experience) that provide supervised clinical experiences in demonstrating the attributes and applying the skills that prepare students for entry into the Physical Therapy profession. Nine hours clinical. Three hours credit.

PTA 2513 - Medical Conditions and Related Pathology (Pre/corequisites: PTA 1123, 1213, 1314, 1324 1223, 2234, 2413 & 2334).

This course provides a basic knowledge of selected diseases and conditions encountered in physical therapy practice. Emphasis is on etiology, pathology, and clinical picture of diseases studied. Various physical therapy procedures in each disability are discussed. Three lecture. Three hours credit.

PTA 2523 - Physical Therapy Seminar (Prerequisite: Four semesters of core Physical Therapist Assistant course work).

This course represents a synthesis of previous didactic, laboratory, and clinical experiences. Students are directed to explore a topic or area of interest in physical therapy practice. Recognition of the importance of employability skills after graduation is included. Three lectures. Three hours credit.

PTA 2912 - Seminar III (Prerequisite: PTA 1912 & 1922).

This course further develops the principles and characteristics presented in PTA 1912 & PTA 1922. Two lectures. Two hours credit.

PRECISION MACHINING 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 2134 — 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. Four hours laboratory. Four 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.

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, and biomedical sciences. 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, anesthesia, pharmacology, and surgical techniques. Two lectures. Eight 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, techniques, and safe patient care in surgical specialty areas of ear, nose, and throat; eye; oral & maxillofacial surgery, orthopedics, and plastics. This course requires clinical experience in area hospital surgical suites 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, techniques, and safe patient care in surgical specialty areas of neurosurgery, thoracic, peripheral vascular, cardiovascular surgery, employability skills, and all-hazards preparation. This course requires clinical experience in area hospital surgical suites and related departments, and a comprehensive final examination. Four lectures. Twelve hours clinical. Eight hours credit.

SUT 1703 — Certification and Role Transition.

This course is an in-depth study of the role of the surgical technologist and review for the certification examination. The course examines liability and legal issues of practice, adapting critical thinking skills to a variety of practice settings, effective team and professional behaviors, continuing education, and ethical issues. Practice on computer simulations is required. Three lectures. Three 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 offers supervised work experience for Career/Technical majors in which the student, Work-Based Learning Coordinator/Instructor, and worksite supervisor/mentor develop and implement a business/education training agreement. Work-Based Learning is designed to integrate the student's academic and technical skills into a work environment. 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:

45 clock hours at work per semester = 1 hour credit
90 clock hours at work per semester = 2 hours credit
135 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, the campus Career-Tech Director, and the Career-Tech Vice President.

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 1444 — Nursing Fundamentals & Clinical

This course provides the student with the basic knowledge and skills necessary to care for the individual in wellness and illness and is applicable across the lifespan, as well as demonstration and supervised practice of the fundamental skills related to practical nursing. Seven lectures. Ten hours lab. Six hours clinical. Fourteen hours credit.

PNV 1524 — IV Therapy & Pharmacology (Prerequisites: PNV 1213 & PNV 1444).

This course provides the student with principles of IV therapy and pharmacology. Principles covered in the course include the administration of medication, administration of IV fluids, and administration of IV medications included in the scope of practice for the practical nurse. The expanded role of IV therapy included in this course is in accordance with the Mississippi Nursing Practice Law and Administrative Code. Three lectures. Two hours lab. Four hours credit.

PNV 1682 — Adult Health Nursing Concepts & Clinical (Prerequisites: PNV 1213 & PNV 1444).

This course is designed to provide the student with the basic theory and clinical experiences needed to provide safe, effective care to the adult client experiencing acute, chronic, or life- threatening physical health conditions in all body systems and the knowledge to prepare for the role transition from student to practical nurse. Eight lectures. Four hours clinical. Twelve hours credit.

PNV 1728— Speciality Areas in Nursing (Prerequisites: PNV 1213 & PNV 1444).

This course provides the student with the basic knowledge and skills to promote and/or provide safe and effective care for clients and families during the antepartum, intrapartum, and postpartum periods as well as in infancy through adolescence. It also provides the basic knowledge and skills to assist in the promotion of the emotional, mental, and social well-being of the client and family experiencing a mental health alteration. 7.33 lectures. Two hours clinical. Eight 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

WLT 1115 — Shielded Metal Arc Welding I (SMAW).
This course is designed to teach students welding techniques using the SMAW process. One lecture. Eight hours laboratory. Five hours credit.

WLT 1124 — Gas Metal Arc Welding (GMAW).
This course is designed to give the student experience in various welding applications with the GMAW process using various modes of transfer. One lecture. Six hours laboratory. Four hours credit.

WLT 1135 — Gas Tungsten Arc Welding (GTAW).
This course is designed to give the student experience in various welding applications using the GTAW process. One lecture. Eight hours laboratory. Five hours credit.

WLT 1143 — Flux Cored Arc Welding (FCAW).
This course is designed to give the student experience using FCAW process. One lecture. Four hours laboratory. Three hours credit.

WLT 1154 — Pipe Welding.
This course is designed to give the student experience in pipe welding procedures. One lecture. Six hours laboratory. Four hours credit.

WLT 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.

WLT 1173 — Introduction to Welding and Safety.
This course is designed to give student an introduction to the welding profession and experience in safety procedures related to welding. Two lectures. Two hours laboratory. Three hours credit.

WLT 1225 — Shielded Metal Arc Welding II.
This course is designed to teach students advanced welding techniques using the SMAW process. One lecture. Eight hours laboratory. Five hours credit.

WLT 1232 — Blueprint Reading, Welding Symbols, and Metallurgy.
This course is designed to give the student experience in blueprint reading, welding symbols, and metallurgy. One lecture. Two hours laboratory. Two hours credit.

WLT 1252 — Advanced Pipe Welding.
This course is designed to give the student advanced pipe welding techniques using shielded metal arc and gas tungsten arc welding processes. One lecture. Two hours laboratory. Two hours credit.

WLT 1313 — 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. One lecture. Four hours laboratory. Three hours credit.

WLT 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 Cutting 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.

WLT 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.

WLT 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 lectures. Two hours credit.

WLT 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 lectures. Three hours credit.

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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. 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

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
- 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 itsintended 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 t 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.• D o 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

ADDENDUM B:
Copyright Policy

Ownership of Material/Copyright

I. Intellectual Property

This policy is applicable to and shall be deemed to be a part of the contract between Holmes Community College and full-time, part-time, and adjunct faculty and other employees and students of the college.

Any employee who plans to create materials or objects developed wholly or partially using Holmes Community College time, equipment, materials or facilities, and who plans to copyright, patent, or otherwise merchandise those materials or objects shall inform the President of that intent prior to using any college resources. Final approval of the resulting agreement rests with the President.

A. College Ownership

Holmes Community College reserves the right of ownership of all intellectual property including but not limited to, books, web pages, electronic documents, programs, curricular, etc. written or otherwise created while using College materials or equipment and while working during time that is compensated by the College.

Holmes, in return for unrestricted license to use and reproduce original work without royalty payment, shall transfer to the creator of that work full ownership of any present or subsequent copyright/patent in accordance with the following paragraph:

In the event that materials or objects are sold to entities outside the college, all income will go to the college until all developmental expenditures incurred by Holmes for that project, including stipends paid to the developer (over and above contract salary), prorated support staff salaries, supplies, and other expenses related to the creation of the materials or objects, are recovered. Thereafter, all remuneration as a result of copyright, publication or patented sale, will go to the creator(s) of the materials or objects.

B. Individual Ownership

However, intellectual property created by an employee of Holmes Community College on their own time and without the use of college facilities, equipment, materials, or support shall be the sole property of the creator(s).

Holmes employees are free to benefit from royalties and monies accruing from books written; teaching aids developed including workbooks, laboratory manuals, transparencies, tapes, films, computer programs, and similar materials; and any equipment designed or invented provided the work to produce such creations is done on the employee's own time and without the use of college facilities, equipment, materials, or support.

No college employee may realize a profit from materials sold exclusively to Holmes Community College students.

C. Co-ownership by College and Individual

In the event that the ownership of the intellectual property is shared by the College and the employee/creator (partnership), the employee/creator will share in the equity (right, claim, or interest) resulting from an intention or copyright. Further, the employee/creator will be entitled to participate in the management of a business related to development of his/her intellectual property. Finally, the employee/creator may share in the equity of a company designed to market for profit the created product.

Holmes Community College adheres to the principles set forth in the Copyright Law, 1976, and the Digital Millennium Copyright Act, 1998.

Since no employee of the college, acting as an employee of the college, may duplicate, distribute, and/or otherwise publish protected material without the written permission of the copyright holder, except under thosecircumstances in which use of the copyrighted material qualifies under the fair-use provision of the copyright laws, therefore-All persons wishing to copy and publish/distribute copyrighted material, including instructors wishing to use copyrighted material in their course handouts, syllabi, exams, etc.,or publish such material through the Internet in online courses or otherwise transmit such material electronically or any other way, must obtain a copy of written permission to do so from the copyright holder.