

Course Descriptions

The letters in the course abbreviations indicate subject areas. The courses are listed in alphabetical order by subject area prefix.

Academic Transfer

Courses Abbreviations	Subject Area	Page Number
ART	Art	80
BIO	Biological Sciences	81
BUS	Business Administration & Economics	81
CIS	Computer Information Systems	82
COM	Mass Communications	83
CSC	Computer Science	85
EDU	Education	85
EGN	Engineering	86
ENG	English/Communications	87
GEO	Geography	90
GUI	Guidance	90
HIS	History	90
HMS	Human Services	92
IDS	Interdisciplinary Studies	93
MAT	Mathematics	93
MFL	Modern Foreign Language	94
MUS	Music	97
PED	Physical Education	100
PHI	Philosophy	101
PHS	Physical Science	101
PHY	Physiology & Health	102
POS	Political Science	102
PSY	Psychology	102
SOC	Sociology	103
THE	Theatre	105

Career & Technical

Courses Abbreviations	Subject Area	Page Number
ADN	Associate Degree Nursing	79
AGR	Agri-Business	79
CIS	Computer Information Systems	82
CRJ	Criminal Justice	84
DCS	Deaf Communication Studies	85
ECE	Early Childhood Education	85
EEE	Electrical/Electronics Technology	86
FST	Fire Science Technology	89

HLT	Health Related Technology	91
HRT	Horticulture	82
MFG	Manufacturing	91
MGT	Management	95
NUR	Practical Nursing	98
OST	Office Systems Technology	99
PAR	Paramedic Technology	99
PAW	Personal Awareness	100
TEC	Technology	103

So that students may plan ahead, the semester(s) in which some courses are normally offered has been indicated after the course title or at the end of the course description. If no semesters are indicated, the course is normally offered during the regular academic year. A course description stating "offered on demand" means these classes will not be offered for one or two students; there must be sufficient interest to warrant a class on a regular schedule.

Students should contact the appropriate division dean for a projected schedule of their course offering. Please check the prerequisites for the advanced courses. Courses in this catalog are subject to change without notice.

Course Levels

001-099 —

Remedial/developmental courses

100-299 —

Freshman/Sophomore level
courses

Lecture/Laboratory Hours

Parenthesis indicate the number of clock hours a course meets each week throughout the semester. For example, (3-2) indicates a course meets three lecture hours and two lab hours per week.

Honors

Readings in Honors and Research in Honors may be offered in a department. Consult Honors Director for current offerings.

ASSOCIATE DEGREE NURSING

ADN142 _____ (Arr.) 3 cr. hrs.
LPN-ADN Transition (Bridge)

Prerequisite: Valid LPN license and acceptance into Advanced Placement Program.

This course is offered in the summer semester and addresses the transition in the roles from LPN to RN with comparisons and differences in responsibility and accountability to the patients.

Other topics addressed in the course include therapeutic communication, nursing process, nursing diagnosis, physical assessment skills, drug calculation review, aspects of critical thinking, and roles of the RN under the Nurse Practice Act. Assignments include case studies for developing nursing diagnoses, completing a health history assessment and demonstrating physical assessment skills by performing a head to toe assessment. Some components require independent study.

ADN145 _____ (Arr.) 6 cr. hrs.
Fundamentals of Nursing

Prerequisite: Acceptance into the ADN Program.

This course is constructed to enable beginning nursing students to synthesize the many complex physiologic and psychosocial concepts that support comprehensive nursing care. Nursing skills are presented in the order in which they are likely to be encountered in the health care setting. Six lecture/lab and eight clinical hours are provided each week.

ADN146 _____ (Arr.) 4 cr. hrs.
Maternity Nursing

Prerequisite: Grade of "C" or above in sequential nursing and science classes.

The course provides instruction and clinical practice in meeting the physiologic, psychologic, and adaptation of the mother and family to pregnancy. Emphasis is on the normal with deviations from the normal. Applications of knowledge in normal growth and development, normal nutrition, and medications in integrated obstetrical care centers, clinics, community centers and obstetricians offices are utilized. Eight lecture/lab and eight clinical hours are provided each week.

ADN148 _____ (1-0) 1 cr. hr.
Contemporary Nursing

Prerequisite: Grade of "C" or above in sequential nursing and science classes.

A course designed to study modern nursing. Emphasis is placed on levels of current nursing practices, concepts, organization, literature, legal and ethical aspects.

ADN149 _____ (Arr.) 10 cr. hrs.
Medical-Surgical Nursing I

Prerequisite: Grade of "C" or above in sequential nursing and science classes.

This course provides the nursing student opportunity to learn how to observe and assess signs, symptoms, reactions, and behaviors of hospitalized patients through use of the nursing process. Emphasis is placed on the pathophysiology underlying any disease conditions and applies principles from the biological, physical, social, behavioral, medical and nursing sciences in the care of these patients. Includes lecture and clinical components.

ADN150 _____ (Arr.) 6 cr. hrs.
Medical-Surgical Nursing II

Prerequisite: Grade of "C" or above in sequential nursing and science classes.

This is a continuation of Medical-Surgical Nursing I. Emphasis is placed on managing the care of a group of patients. This course also integrates techniques of nursing leadership and delegation to unlicensed assistive personnel. Includes lecture and clinical components.

ADN 151 _____ (1-0) 1 cr. hr.
Clinical Pharmacology

Prerequisite: Grade of "C" or above in sequential nursing and science courses.

This course is designed to introduce the student to common characteristics of each drug classification and each prototype drug within the group.

This class presents relevant information about current medications by showing the reasoning behind the ways in which drugs of different classes are used in treating patients with various disorders. Emphasis is on drugs of the autonomic nervous system, cardiovascular system, respiratory system, and the central nervous system.

ADN157 _____ (1-0) 1 cr. hr.
Basic Pharmacology

Prerequisite: Acceptance into the ADN Program.

This course is an introduction to the administration of medicine. Basic information concerning the various pharmaceutical names and preparations, their administration techniques, and nursing implications will be given. Emphasis in the class is upon calculations used in the administration of medicine. This must be taken concurrently with Fundamentals of Nursing.

ADN161 _____ (Arr.) 5 cr. hrs.
Nursing of Children

Prerequisite: Grade of "C" or above in sequential nursing and science courses and Human Growth and Development.

This course is designed to provide instruction and clinical practice in meeting the needs of the child and family from infancy through adolescence. Principles and theories of child development as well as culture, experience, and nutritional influences are integrated.

Focus is placed on acute and chronic illness, hospitalization effects, congenital abnormalities, and nursing care specific to particular age groups and health problems.

ADN163 _____ (Arr.) 4 cr. hrs.
Mental Health Nursing

Prerequisite: Grade of "C" or above in sequential nursing and science classes.

This course is designed to introduce the student to history and trends in psychiatric nursing, major psychiatric theoretical models, the five axes of the psychiatric classification system, the major psychiatric illnesses inclusive of definitions, clinical manifestations, psychopharmacology, medical treatments,

nursing interventions and milieu management. This course is intended to provide fundamental knowledge of mental health concepts and interactional techniques for the beginning nurse. The role that emotions and stress play in the behavior of the client and client's family are emphasized to give the student with a better understanding of behavior and provide a useful framework for planning and providing nursing care in any health care setting. Hospital-based and community-based mental health clinical experience is included.

ADN164 _____ (3-0) 3 cr. hrs.
Therapeutic Nutrition

Prerequisite: Grade of "C" or above in sequential nursing and science classes.

This course provides the student with the basic foundation of nutrition and adaptation of diets to meet individual needs. Included are nutrients and dietary sources necessary for maintaining good health, and alterations required in diets of individuals who have specific disease processes.

AGRI-BUSINESS

AGR112 _____ (5-2) 5 cr. hrs.
Animal Science (fall)

An overview of the biological principles of animal science including reproduction, genetics, nutrition, lactation, consumer products, and others.

Field trips to emphasize techniques in artificial insemination and processing of animal products supplement weekly laboratory activities. A study of animal diseases and public health along with current issues in animal science is covered.

AGR123 _____ (5-2) 5 cr. hrs.
Plant Science (spring)

A comprehensive introduction to plant science covering plant physiology, biochemistry, and genetics and the major environmental factors that affect plants.

Manipulation of plants by various techniques of propagation, both sexual and asexual, including new methods in areas such as tissue culture in plant cloning and hydroponics are introduced. A brief overview of major world crops and their contributions to our needs for food and fiber is provided.

AGR130 _____ (3-0) 3 cr. hrs.
Vegetable Gardening

A basic course for gardeners interested in learning more about the whys and hows of vegetable production for either commercial or home consumption.

AGR142 _____ (5-2) 5 cr. hrs.
Soils (fall)

Prerequisite: PHS125 or above chemistry (for transfer students only)

A scientific approach to the concepts of soil formation, classification, and soil characteristics such as biological and reactive properties. Essential macro and micro nutrients and their management are covered. Issues such as soil erosion and chemical pollution are explored and geographic information about soils are presented.

AGR143 _____ (3-0) 3 cr. hrs.
Introduction to Soils (fall)

A course designed to develop an understanding of the basics of soil development, classifications, management, fertility, testing, and origins as related to plant growth. Practical application of soil science principles and soil management is stressed.

AGR145 _____ (2-0) 2 cr. hrs.**Farrier Science and Limb Anatomy**

The study of proper shoeing and its importance to the useful life of the horse. Includes the anatomy and physiology of the horse's limbs, farrier's tools and horse shoes, and methods of regular, corrective and pathological shoeing.

AGR146 _____ (3-0) 3 cr. hrs.**Equine Science and Management (spring)**

An introductory course to equine science and management designed to provide a basic core of information necessary for success in equine-related occupations. The course will prepare students for managing small one- or two-horse facilities, as well as provide them with a sound foundation for advanced equine education programs.

AGR155 _____ (3-0) 3 cr. hrs.**Livestock Production (fall)**

A course designed to develop skills necessary to successfully manage a livestock enterprise. Emphasis will be placed on selection, reproduction, housing, and environment management. Breeds and enterprise selection and the economics of beef, dairy, swine and sheep are covered.

AGR165 _____ (3-0) 3 cr. hrs.**Agriculture Credit & Finance (spring)**

Prerequisite: Sophomore standing or consent of instructor.

A survey of the principles, concepts and functions of credit and finance as related to agriculture.

AGR170 _____ (3-0) 3 cr. hrs.**Farm Management (spring)**

Principles and decision making tools applied to practical farm problems. Budgeting, break even analysis, farm records, capital use, investment decision, size and taxes are among topics discussed.

AGR172 _____ (3-0) 3 cr. hrs.**Agriculture Chemicals (spring)**

Prerequisite: Sophomore standing or consent of instructor.

A course designed to develop a thorough understanding of agricultural chemicals, including fertilizers and pesticides. Disease and insect control will be introduced. Proper application methods and safety will be stressed.

AGR175 _____ (3-0) 3 cr. hrs.**Farm Record Keeping**

This course will be designed to help farm families learn to set up a good farm record-keeping system.

AGR177 _____ (1-0) 1 cr. hr.**Contemporary Agriculture Issues I**

Prerequisite: Sophomore standing or consent of instructor. Required for AAS degree.

A course designed to explore current agricultural issues, policies, legislation, or programs. It will provide a vehicle to present a knowledge base that is current with ever-changing technology and related action.

AGR179 _____ (1-0) 1 cr. hr.**Contemporary Agriculture Issues II**

Prerequisite: AGR177. Required for AAS degree.

A course designed to explore current agricultural issues, policies, legislation, or programs. It will provide a vehicle to present a knowledge base that is current with ever-changing technology and related action.

AGR180 _____ (1-0) 1 cr. hr.**Agriculture Leadership and Employment (fall)**

A course designed to provide agriculture students with opportunities for individual growth, leadership and career preparation. Students will survey individuals currently working in an area of agriculture in which the student is interested in pursuing a career. From the survey the students will prepare a career plan including long- and short-term goals, training and work experience, and leadership and human relations skills. The class requires the students to prepare a resume, cover letter, follow-up letter and employment application form. Students will also participate in a mock interview.

AGR210 _____ (1-0) 1 cr. hr.**Agriculture Industry Seminar (fall)**

Prerequisite: AGR180

This course is designed to prepare students to enter the agriculture industry. Special emphasis will be given to determining the competencies necessary for employment in specific areas of agriculture. Career progress goals and critical thinking skills that can be implemented in agricultural occupations will be developed. Students will develop an individual career plan and prepare a resume that complements the plan.

AGR220 _____ (Arr.) 3 cr. hrs.**Agriculture Internship I**

Prerequisite: Sophomore standing.

Supervised on-the-job training in selected agricultural business and industry coordinated by the College. Student will spend 90 clock hours at internship site. A training plan will be written for each student. Periodic visits will be made by instructor for conferences with the student and employer.

AGR225 _____ (Arr.) 3 cr. hrs.**Agriculture Internship II**

Prerequisite: AGR220

Supervised on-the-job training in selected agricultural business and industry coordinated by the College. Student will spend 90 clock hours at internship site. A training plan will be written for each student. Periodic visits will be made by instructor for conferences with the student and employer. This is a continuation of AGR220.

ART**ART113 _____ (2-4) 3 cr. hrs.****Drawing I (fall, spring)**

An introduction to drawing with emphasis on perception and developing a familiarity with elements of art and a sensitivity to their use in drawing. Various media are introduced so that the student gains an awareness of the potential of each.

ART114 _____ (2-4) 3 cr. hrs.**Drawing II (spring, summer)**

Prerequisite: ART113.

An extension of Drawing I with additional emphasis on elements of drawing. Various materials and ways of working are introduced to emphasize the problems or organization of ideas and presentations of visual statements. Particular attention is given to the human figure.

ART116 _____ (2-4) 3 cr. hrs.**Painting I (fall, spring)**

Prerequisite: ART113 or consent of instructor.

An introduction to painting with the emphasis placed on the basic study of form, space, composition, and color theory utilizing such media as oil and acrylics.

ART120 _____ (2-1) 2 cr. hrs.**Sketching**

A course designed to introduce the students to the techniques of keeping a sketchbook and utilizing it for the production of finished art work. Offered in conjunction with student tours. The offerings will vary depending on the country to be visited.

ART123 _____ (2-4) 3 cr. hrs.**Ceramics (spring or summer)**

An introductory course which explores and emphasizes the basic elements and techniques of ceramics. The course will stress the fundamental methods of pottery making: hand-built, wheel throwing, and glazing.

ART140 _____ (2-0) 2 cr. hrs.**History of Western Art**

A course designed to introduce the student to the visual masterpieces of a particular western civilization. It stresses both the style, function and historical context of art. Offered in conjunction with student tours. The offering will vary depending on the country to be visited.

ART149 _____ (3-0) 3 cr. hrs.**History of Art I**

History of ancient art from prehistoric to medieval time. (Cultural diversity course.)

ART150 _____ (3-0) 3 cr. hrs.**History of Art II**

The study of Renaissance and Baroque art. (Cultural diversity course.)

ART151 _____ (3-0) 3 cr. hrs.**History of Art III**

History of the major developments in the art of the 19th and 20th Centuries. (Cultural diversity course.)

ART153 _____ (3-0) 3 cr. hrs.**Introduction to Humanities**

An introduction into the nature of the humanities. Dominant themes of human self expression and the key ideas and values of western cultures are discovered through a comparative and integrated study of painting, sculpture, architecture, literature, music and the art of film.

ART155 _____ (2-4) 3 cr. hrs.**Beginning Photography**

An elective course introducing the basics of photography, concentrating on an understanding of camera systems and the techniques of black and white film developing and printing.

ART162 _____ (1-3) 2 cr. hrs.**Printmaking**

Prerequisite: ART113 or consent of instructor.

An introduction to the basic graphic processes, materials, and equipment used in relief and intaglio printing. The course will stress the expressive potentialities of the wood block, the etching and the collograph.

ART172 _____ (1-3) 2 cr. hrs.**Watercolor**

Prerequisite: ART113 or consent of instructor.

An introduction to the theory and practice of painting in watercolor with emphasis on experimentation with techniques as well as creative expression. Offered on demand.

ART183 _____ (2-4) 3 cr. hrs.**Two-Dimensional Design (fall)**

An exploration of the two-dimensional surface as related to the visual elements of shape, color, form, line, space and texture. Emphasis on problems in applying principles of design in various media.

**ART185 _____ (1-3) 2 cr. hrs.
Color Theory**

A course in the theory and application of color. Lecture and studio problems will emphasize the interaction of color as it applies to two-dimensional art.

**ART193 _____ (1-3) 3 cr. hrs.
Sculpture I (spring)**

Prerequisite: ART113 or consent of instructor.

An investigation and employment of various materials and methods of sculpting including modeling head and figure, and elementary processes of casting, carving, and construction.

**ART195 _____ (2-4) 3 cr. hrs.
Contemporary Metalsmithing I**

Students will explore a variety of techniques relating to the forming of steel into sculptural forms. Students will learn the basics of operating forges and welding equipment with an emphasis on non-functional three-dimensional forms.

**ART216 _____ (2-4) 3 cr. hrs.
Painting II**

Prerequisite: ART116 or consent of instructor.

This course is an expansion of Painting I, with an emphasis on developing painting techniques to a more advanced state. The student's own ideas become important in this class. Landscape painting, Still Life, Abstract, and Expression become important factors. More attention is placed on painting materials and mediums.

BIOLOGICAL SCIENCE**BIO001 _____ (Arr.) 1 cr. hr.
Introduction to General Science I**

Emphasis is placed on the Biological Sciences. Self-paced instruction offered in the Learning Center. Does not apply toward the AA degree.

**BIO110 _____ (3-0) 3 cr. hrs.
Introduction to Biological Science**

An introductory biology class which teaches the fundamentals of biology as well as how biology is applied in the real world. This course examines the scientific method, the characteristic elements, processes and features common to all life forms, and the nature and workings of the human body. This class is designed to meet general education requirements and is intended for the non-science major.

**BIO115 _____ (3-4) 5 cr. hrs.
General Biology**

A course that presents selected basic biological concepts and principles fundamental to the understanding of the operation of biological systems. The nature of science concepts of biological organization, characteristics and chemistry of the cell, energy relationships, reproduction, heredity, classification, evolution and environmental relationships of living things may be presented. This course meets the general education biological science requirement.

**BIO125 _____ (3-4) 5 cr. hrs.
General Botany (spring)**

A course emphasizing biological principles as applied to plants. Plant structure, function, genetics, reproduction, physiology and classification are stressed. This course meets the general education biological science requirement.

**BIO133 _____ (2-3) 3 cr. hrs.
Local Flora (Odd year spring)**

This course is designed to acquaint students with local plants by actual collection, identification, preservation and mounting of such plants. Students may choose an area of specialization dealing with fungi, lichens, ferns, or flowering plants.

**BIO134 _____ (Arr.) 3 cr. hrs.
Local Fauna (On Demand)**

Prerequisite: Consent of instructor.
This independent study course involves exploration of some vertebrate group or topic chosen by the student and instructor. Information may come from literature reviews, interviews with experts, field work and/or field trips. Information gathered will then be compiled in a research paper of appropriate length.

**BIO135 _____ (3-4) 5 cr. hrs.
General Zoology (fall)**

An introduction to the important principles and concepts of zoology. This course emphasizes cell biology, genetics, reproduction, and the major animal phyla. Three lectures and two double laboratory periods per week. This course meets the general education biological science requirement.

**BIO143 _____ (3-0) 3 cr. hrs.
Environmental Science**

A general introductory course in human ecology. The general concepts of Ecology will be covered in early chapters. Then the remainder of this course emphasizes human contributions to resource depletion, energy conservation, overpopulation and overconsumption, pollution and subsequent worldwide effects.

**BIZ143 _____ (0-4) 2 cr. hrs.
Environmental Science Laboratory (alternate spring)**

This course is designed as either a stand-alone, two-hour science credit or as a lab to accompany Environmental Science lecture BIO143. Students will learn to sample and evaluate water, soil, plants and animals. Recommended as an elective or to fulfill part of the life science requirement.

**BIO224 _____ (2-4) 4 cr. hrs.
Field Biology (alternate spring)**

Prerequisite: Either BIO115, BIO125, BIO135, or consent of instructor.
This course is designed to acquaint students with local fauna and some flora. The taxonomy and natural history of local forms will be emphasized as well as general information on the major groups of animals and some plants and their ecology. Field trips are required.

**BIO234 _____ (3-0) 3 cr. hrs.
Survey of Genetics (even-year spring)**

Prerequisite: BIO115, BIO125, or BIO135.
A survey of the basic principles of genetics with an emphasis on human application and basics of plant genetics. This course is designed to meet general education requirements. It is intended for both the non-science major and the science major.

**BIO254 _____ (3-4) 5 cr. hrs.
Human Anatomy and Physiology (spring)**

Prerequisite: BIO115, BIO 125, BIO135, or PHS125 or higher.
This course is designed to provide the student with an understanding of the structure and function of the human body. The course includes macroscopic and microscopic study of tissues, basic chemistry of life processes and skeletal, muscular and cardiovascular systems.

Recommended for science and physical education majors as well as some non-nursing hospital based courses such as radiology. The BIO260 Human Anatomy and the BIO262 Human Physiology for a total of 10 hours are required for the nursing program. BIO254 is considered as Anatomy and Physiology I for many transferring institutions.

**BIO258 _____ (2-2) 3 cr. hrs.-
Microbiology (fall)**

Prerequisite: At least a "C" in BIO260, BIO262, and PHS125 or consent of the instructor.

This course introduces the morphology, biochemical activities, cultivation, control, history of epidemiology and diagnostic procedures used to identify selected microorganisms that are important in the health sciences. This course is required for the ADN nursing program.

**BIO260 _____ (3-4) 5 cr. hrs.
Human Anatomy (fall)**

Prerequisite: Acceptance into ADN or PN nursing program or consent of the instructor.

This course is the study of the structure of the human body. Topics include body organization, cellular and developmental anatomy and the anatomy of selected body systems (integumentary, skeletal, cardiovascular, neural and muscular). Remaining body systems are covered in Human Physiology (BIO262) This is a required class in the nursing program.

**BIO262 _____ (3-4) 5 cr. hrs.
Human Physiology (spring)**

Prerequisite: At least a "C" in BIO260, PHS125 or consent of instructor.

This course is a continuation of BIO260. The course concentrates on the biochemical, cellular and organ level functioning of those systems introduced in BIO260. Systems include digestive, metabolic, endocrine, cardiovascular, immunology, muscular, neural, renal and respiratory. This course is required for the ADN nursing program.

**BIO298 _____ (Arr.) 1 cr. hr.
Readings In Honors**

A small group discussion class which involves reading assignments from books or magazines, experience in leading and participating in discussions, watching selected videos, and writing short papers on particular aspects of the assigned reading.

**BIO299 _____ (Arr.) 1 cr. hr.
Research in Honors**

Individual or small groups of students researching some aspect of the life sciences and then compiling and presenting their findings to their peers and/or some community sector, or writing up their results in a well organized paper.

**BUSINESS ADMINISTRATION
AND ECONOMICS****BUS001 _____ (Arr.) 1 cr. hr.
Introductory Accounting I**

For the student with no prior knowledge of accounting. Prepares the student for regular accounting courses. Independent and/or self-paced instruction offered in the Learning Center. Does not apply toward the AA degree.

**BUS002 _____ (Arr.) 1 cr. hr.
Introductory Accounting II**

Further prepares the student for regular accounting courses. Independent and/or self-paced instruction offered in the Learning Center. Does not apply toward the AA degree.

BUS133 _____ (3-0) 3 cr. hrs.**Introduction to Economics**

Introductory economics course intended for non-business majors. Both Macroeconomic and Microeconomic topics will be integrated into real world application.

BUS200 _____ (3-0) 3 cr. hrs.**Principles of Accounting I**

Prerequisite: 1 year of high school accounting, OST150, or consent of instructor.

An introductory course in accounting principles. The course covers the accounting process for a sole proprietorship (service and merchandising organization) and the following specialized accounting areas: cash, receivables, payables, deferrals, accruals, inventory, plant assets, intangible assets, and payroll.

BUS205 _____ (3-0) 3 cr. hrs.**Principles of Accounting II**

Prerequisite: BUS200 with a grade of "C" or better or OST150 and OST152 with a grade of "C" or better.

A continuation of BUS200. Topics include the following: partnership accounting, corporation accounting, manufacturing accounting, financial statement analysis, and special management reports.

BUS210 _____ (3-0) 3 cr. hrs.**Fundamentals of Management**

A basic course in the principles and practices of business management as it concerns planning, organization, staffing, direction, and control.

BUS233 _____ (3-0) 3 cr. hrs.**Marketing**

A study of the decision areas involved in providing consumers with goods and services. Topics include the following: product policy, branding, packaging, consumer motivation, consumer characteristics, pricing, promotion, and distribution. This course is the only marketing course that applies to the Associate of Arts degree.

BUS243 _____ (3-0) 3 cr. hrs.**Introductory Statistics**

Prerequisite: MAT113 or consent of instructor.

An elementary course on uses of central tendency and measures of variation on data; introduction of probability; probability distributions; sampling distributions; and analyzing simple experiments using hypothesis testing techniques.

BUS253 _____ (3-0) 3 cr. hrs.**Legal Environment of Business**

A general study of the legal environment in which a business person must operate from the standpoint of legal institutions, legal process, ethics and social responsibility, international influences, and a survey of the following substantive areas of law: crimes, torts, contracts, sales, consumer protection, bankruptcy, labor law, securities regulation, environmental law, antitrust law and cyber law.

BUS293 _____ (3-0) 3 cr. hrs.**Principles of Macroeconomics**

This course is primarily a study of the U.S. economic system. Topics include capitalism, economic growth, macroeconomic measurements, trade, fiscal policy, money and monetary policy.

BUS294 _____ (3-0) 3 cr. hrs.**Principles of Microeconomics**

A continuation of BUS293 with an emphasis on the following topics: market structures, resource allocation and current economic problems. This course is primarily a study of

market systems. Micro topics include pricing, costs and efficiencies in each of the market models. Consumer behavior and a modern view of technological advance will also be discussed.

COMPUTER INFORMATION SYSTEMS

The typical sequence of computer courses begins with CIS105, Introduction to Computers.

Following CIS105, the sequence of the applications courses can be varied. Word processing is typically selected early because of its widest usage. Applications courses that follow CIS105, Introduction to Computers, include: word processing courses (CIS232 or CIS235), database (CIS210), spreadsheets (CIS220), Desktop Publishing (CIS170), Microcomputer Applications (CIS175), Microcomputer Graphics (CIS110), and Microcomputer Operating Systems (CIS200).

Students desiring more in-depth knowledge and skills can subsequently take the advanced applications courses in word processing, spreadsheets and desktop publishing.

CIS105 _____ (3-0) 3 cr. hrs.**Introduction to Computers**

Prerequisite: Keyboarding skills are necessary for enrollment. Student cannot concurrently enroll in CIS105 and CIS175.

An introduction to the field of computers and information processing. Emphasis is on understanding the capability, operation, and applications of computers. Students will use microcomputers to learn the basic concepts of the most popular microcomputer applications such as word processing, spreadsheets, graphics, database management, e-mail, Internet and Windows interface.

CIS110 _____ (3-0) 3 cr. hrs.**Microcomputer Graphics**

Prerequisite: CIS105 or CIS175.

A course designed to provide the student practical experience with microcomputer graphics, including manipulation of graphic units and text, multiple screen image transfer, diagram size and shape modification, business chart customization, freehand drawing, etc.

CIS161 _____ (3-0) 3 cr. hrs.**IT Fundamentals**

This course will allow the student to show that they have a solid competence in computers and office programs, plus the know how to surf the Internet and send an e-mail message. This class will help the student prepare for the Certiport IC³ Certification.

CIS162 _____ (3-0) 3 cr. hrs.**A+ Computer Repair and Maintenance**

Prerequisite: CIS105, CIS175 or consent of instructor

This course is a study of the computer from its beginnings through the present day Pentium machines. This course is the foundation for entry-level computer technicians. Through lectures, discussions and lab exercises, students will learn the skills and gain the knowledge necessary for A+ certification. This class provides the necessary focus to prepare students to meet the objectives of the A+ exams.

CIS165 _____ (Arr.) 3 cr. hrs.**Accounting on Microcomputer**

Prerequisite: BUS 205 or OST152.

A course on computerized accounting for students who have already learned the manual accounting system. A microcomputer is used to provide hands-on experience in accounting using general ledger, accounts receivable,

accounts payable, payroll, depreciation, inventory, and financial statement analysis.

CIS167 _____ (3-0) 3 cr. hrs.**Fundamentals of Networking**

Prerequisite: CIS161 or consent of instructor.

This course is an entry-level course in networking. The course will cover various aspects of designing and implementing a network for both home and office. This class will help the student prepare for the CompTIA Network+ Certification.

CIS168 _____ (3-0) 3 cr. hrs.**Fundamentals of Network Security**

Prerequisite: CIS167, Network+ Certification or consent of instructor.

This course is an entry-level course in network security. The course will cover various aspects of designing and implementing a secure network for both home and office networks. This class will help the student prepare for the CompTIA Security+ Certification.

CIS170 _____ (3-0) 3 cr. hrs.**Desktop Publishing**

Prerequisite: CIS105 or CIS175.

A course designed to teach the basic use of desktop publishing software on an IBM compatible microcomputer. Principles of typography, page layout and design to fit publication needs, and the basic operation of the program are covered.

CIS175 _____ (3-0) 3 cr. hrs.**Microcomputer Applications**

Prerequisite: Previous regular usage of word processor, spreadsheet or database application. Student cannot concurrently enroll in CIS105 and CIS175.

Gaining proficiency in the most commonly used applications of microcomputers in business: word processing, electronic spreadsheets, graphics, presentations and database management using an integrated Windows-based software suite that performs all these applications.

CIS180 _____ 2 cr. hrs.**Introduction to Networking**

Prerequisite: CIS105 or CIS175.

Gives a high level overview of network concepts, topologies, components, media, functions, protocols, architecture, fault tolerance, and larger networks. Develops a solid base to build on for future courses and helps prepare the student for the Microsoft Networking Essentials Exam.

CIS183 _____ (3-0) 3 cr. hrs.**Novell Network Administration**

Prerequisite: CIS200.

Enables the student to perform day to day administrative tasks on a Novell network. Helps prepare the student for Certified Novell Administrator (CNA) exam. Lab is used to perform tasks described in lectures. Topics include Netware Server Installation, Network access, Novell login components, Novell Directory Services, login scripts, Z.E.N. works and Workstation Management, and many other topics related to managing Novell networks.

CIS184 _____ (3-0) 3 cr. hrs.**Microsoft Networking Administration**

Prerequisite: CIS200.

This course enables the student to perform day-to-day administration tasks on a Microsoft Windows network.

CIS185 _____ (5-0) 5 cr. hrs.
Internetworking I

Prerequisite: CIS105, CIS175 or A+ certification.

First of four semesters (CIS185, CIS186, CIS285, CIS286) in the Cisco™ Networking Academy curriculum. Satisfactory completion of all four semesters prepares you to sit for the Cisco™ Certified Network Associate (CCNA) exam. Semester I topics include: OSI model and industry standards, Network topologies, IP addressing, including subnet masks, Networking components, Basic network design.

CIS186 _____ (5-0) 5 cr. hrs.
Internetworking II

Prerequisite: CIS185.

Continuation of the Cisco™ Network Academy. Introduction to router configuration; Routes and routing protocols.
(See CIS255, CIS286).

CIS190 _____ (3-0) 3 cr. hrs.
Fundamentals of UNIX

Prerequisite: CIS200.

This course will enable the student to perform basic, entry-level UNIX operator skills and use the UNIX operating system commands. Students will also learn fundamental command-line features of the UNIX operating environment including file system navigation, file permissions, the vi text editor, command shells and basic network use.

CIS193 _____ (3-0) 3 cr. hrs.
Computer Ethics

A study of the challenges and responsibilities of IT professionals as well as the casual computer user. The advent of the Internet and general computer usage has created new opportunities for exploitation in technology, management, the market and education. Content includes legal issues regarding piracy, hacking, intellectual property, acceptable use, privacy and freedom of speech.

CIS200 _____ (3-0) 3 cr. hrs.
Microcomputer Operating Systems

Prerequisite: CIS105 or CIS175.

An introduction to operating system principles and functions. Special emphasis is given to fundamentals and advanced skills necessary to use Windows. Additional emphasis is given to use of DOS commands to manipulate files. Overview of EDIT and/or text editors, batch files, and system configuration files.

CIS210 _____ (3-0) 3 cr. hrs.
Microcomputer Database Management

Prerequisite: CIS105 or CIS175.

A practical course utilizing a microcomputer software package to acquaint the student with database management tasks of moderate complexity. Topics of study include: file design and creation, table manipulation, record editing and display, queries, report generation, using multiple files.

CIS211 _____ (3-0) 3 cr. hrs.
Advanced Microcomputer Database Management

Prerequisite: CIS210.

This course is a continuation of CIS210 in which students will design database systems and create the programs with which to manage them. Topics of study include: principles of database design, linking files, design/coding/debugging of database programs, and customized report and label generation. Offered on demand.

CIS220 _____ (3-0) 3 cr. hrs.
Microcomputer Spreadsheet Applications

Prerequisite: CIS105 or CIS175.

A practical course utilizing a computer

software package to acquaint the student with spreadsheet applications of moderate complexity. Topics of study include: file creation/manipulation, cell editing, ranges, functions, sorting, formulas, graphs, printer control, and database functions, and multiple worksheets.

CIS221 _____ (3-0) 3 cr. hrs.
Advanced Microcomputer Spreadsheet Applications

Prerequisite: CIS220.

A continuation of Micro Spreadsheet Applications. Advanced formatting techniques, advanced functions, Lists, Analysis Tools, Auditing worksheets, workgroup collaboration and file-sharing techniques, importing and exporting data.

CIS232 _____ (3-0) 3 cr. hrs.
Word Processing—WordPerfect for Windows I

Prerequisite: CIS105 or CIS175.

A practical course using WordPerfect for Windows to acquaint the student with word processing applications of moderate complexity. Topics include: cursor movement, editing, document formatting, columnar typing, cut, copy, and move functions, text enhancement, spellers/thesaurus usage, and printer control.

CIS233 _____ (3-0) 3 cr. hrs.
Word Processing—WordPerfect for Windows II

Prerequisite: CIS232.

This course is a continuation of WordPerfect for Windows I which provides opportunities for practical applications in creating more advanced documents using WordPerfect for Windows software. The student will learn how to integrate text and graphics and use WordPerfect for Windows as a desktop publisher.

CIS235 _____ (3-0) 3 cr. hrs.
Word Processing—Microsoft Word

Prerequisite: CIS105 or CIS175.

A practical course utilizing Microsoft Word to acquaint the student with word processing applications of moderate complexity. Topics include: cursor movement, editing, document formatting, columnar typing, block functions, text enhancement, print control, etc.

CIS240 _____ (3-0) 3 cr. hrs.
Web Page Development

Prerequisite: CIS105 or CIS175

Introduces web page design and development using a variety of tools including HTML and popular application development tools. Helps prepare for World Certified Web Designer Apprentice exam. Includes Cisco™ Supported Curriculum and Adobe development suite.

CIS267 _____ (3-0) 3 cr. hrs.
Internetworking III

Prerequisite: CIS186.

Continuation of the Cisco™ Networking Academy. Advanced router configurations; LAN switching theory and VLANs; Advanced LAN and LAN switched design; Novell IPX; Threaded case study. (See CIS185, CIS186).

CIS269 _____ (3-0) 3 cr. hrs.
Internetworking IV

Prerequisite: CIS267.

Final semester in the Cisco™ Networking Academy. WAN theory and design; WAN technology, PPP, Frame Relay, and ISDN; Network troubleshooting; National SCANS Skills; Threaded case study.

CIS293 _____ (3-0) 3 cr. hrs.
Advanced Microcomputer Applications

Variable content course which closely examines a microcomputer application for the purpose of expanding the student's practical

knowledge in that area. Offered on demand. Previous computer experience necessary.

CIS294 _____ (3-0) 3 cr. hrs.
Advanced Desktop Publishing

Prerequisite: CIS170.

A continuation of CIS170 Desktop Publishing to expand the student's proficiency in developing quality publications.

CIS296 _____ (Arr.) 3 cr. hrs.
Computer Networking Internship

Prerequisite: Sophomore standing in Computer Networking and instructor approval.

This course is intended for computer networking majors. The Internship class features supervised work experience in the computer networking/information technology field. This will provide the student with the opportunity to make practical application of the knowledge and skills they have attained

MASS COMMUNICATIONS**COM100 _____ (3-0) 3 cr. hrs.**
Introduction to Mass Media

Survey course covering all forms of mass media from print to recording to movies and electronic media including new media and the Internet. The course will also cover the impact of advertising and public relations on the media industries as well as focus on the effects of the media and associated regulation.

COM102 _____ (3-0) 3 cr. hrs.
Introduction to Broadcasting

Survey course covering the history and development of electronic broadcast technology, analog and digital technology, commercial operations, programming and ratings and effects and regulation, including constitutional issues.

COM106 _____ (3-0) 3 cr. hrs.
Introduction to Cinema

Covers the techniques involved in creating good cinema including: photography, Mise en Scene (elements in visual composition), the moving camera and special effects, editing, sound, acting, drama, story, writing and film from a variety of ideological perspectives. Techniques are applied to a variety of selected films for analysis, example and discussion. This course meets the Cultural Diversity requirement. (Cultural diversity course.)

COM110 _____ (3-0) 3 cr. hrs.
Journalism I

Course is intended as an introduction to journalism. The student is introduced to the journalistic style of writing, terms used in newspaper work, editing copy, newspaper layout and design.

COM112 _____ (3-0) 3 cr. hrs.
Journalism I: News Writing

News writing and reporting techniques will be covered in this introductory course through discussion, reading and practical exercises. Course will include practice in reading the news, study of headlines and make-up, and practical experience writing and editing copy.

COM200 _____ (3-0) 3 cr. hrs.
Introduction to Public Relations

Prerequisites: COM100, ENG133 and ENG134 with a grade of "C" or better.

Course in an overview survey of today's public relations field, its functions, vocabularies and various applications related to the media communications area. Students will also get practical experience functioning as a PR "agency".

COM204 _____ (3-0) 3 cr. hrs.**Journalism I: News Writing II**

Prerequisites: COM112 with a grade of "C" or better.

A continuation of practical work in writing and editing copy. The student will be exposed to the practical and theoretical techniques of editing and designing a newspaper. Students are required to write, rewrite and edit copy on a regular basis.

COM206 _____ (3-0) 3 cr. hrs.**Journalism Copy-Editing and Layout**

Prerequisites: COM110 or COM112 with a grade of "C" or better.

Designed to teach the techniques of producing a small newspaper. Subjects include: the newspaper staff, content, editing, typography, paste-up, deadlines and page layout. Students also receive instruction on the principles of good design in newspapers.

COM220 _____ (3-0) 3 cr. hrs.**T.V. Production**

Prerequisites: COM102 with a grade of "C" or better, or instructor's permission.

Basic hands-on introductory course covering both audio and video production equipment usage and production techniques. Course will cover production conceptualization, script writing, camera usage, lighting, special effects and graphics, audio production and individual and group production assimilation.

COM226 _____ (Arr.) 3 cr. hrs.**T.V. Production Practicum**

Prerequisite: COM102 with a grade of "C" or better.

Course will be taught as a video practicum with the emphasis on creating a broadcast-ready product.

CRIMINAL JUSTICE**CRJ101 _____ (Arr.) 3 cr. hrs.****Internship**

This course is intended for criminal justice majors only who have completed a minimum of fifteen (15) hours of criminal justice courses with a grade of "C" or higher. Students are placed with a criminal justice agency in a participant/observer capacity by the department coordinator for a period of not less than 96 contact hours.

CRJ103 _____ (1-0) 1 cr. hr.**Computer Application for Law Enforcement**

This course will provide computer training for students to specific needs of law enforcement personnel. Students will achieve the objectives of police report writing via computer, data analysis, criminal information gathering and intelligence reporting. The basic needs of police work by computer will be achieved in this course.

CRJ104 _____ (3-0) 3 cr. hrs.**Computer Application for Law Enforcement**

Provides computer training for specific needs of public safety personnel. Students will achieve the objectives of police report writing via computer, data analysis, criminal information gathering and intelligence reporting. The course will prepare students for certification in Emergency Medical Dispatch (EMD) and Basic Telecommunication. The objectives will also closely follow requirements of public safety professionals including state statutes, local ordinances and/or agency requirements.

CRJ110 _____ (3-0) 3 cr. hrs.**Introduction to Criminal Justice**

The history and philosophy of the system, identifying the various subsystems, role

expectations, and their interrelationships, theories of crime punishment and rehabilitation. The interrelationships of the various branches and functions of the criminal justice system are examined and identified.

CRJ120 _____ (3-0) 3 cr. hrs.**Criminal Investigation I**

The study of the criminal act and its investigation, including specific crimes against persons and against property. The process of fact gathering, testing of hypotheses, and the problem of proof are covered.

CRJ130 _____ (3-0) 3 cr. hrs.**Criminal Investigation II**

The recognition, collection, identification, preservation, transportation, and development of criminal evidence. Narrative police report writing and the preparation of cases for prosecution.

CRJ140 _____ (3-0) 3 cr. hrs.**Criminal Law**

Prerequisite: A grade of "C" or higher in CRJ110 or consent of the instructor.

The study of constitutional, criminal, common and statutory law within the context of enforcement. The impact of recent federal constitutional laws in the area of state criminal adjudication is examined. Included are the various court structures.

CRJ150 _____ (3-0) 3 cr. hrs.**Criminal Evidence**

The study of the basic rules of evidence applicable to criminal adjudication and other related police duties. Emphasis is placed on the question of admissibility to evidence and the practical application of procedural and substantive law and constitutional guarantees.

CRJ160 _____ (3-0) 3 cr. hrs.**Juvenile Justice System**

The organization, functions and jurisdiction of juvenile agencies, the detention of juveniles and the processing of neglected and abandoned children. The intent, application and procedure of the Missouri Juvenile code, juvenile case disposition, crime prevention methods and reporting procedure. Theories of delinquent behavior are studied.

CRJ170 _____ (3-0) 3 cr. hrs.**Patrol and Traffic Law**

The foundations of police operations, providing patrol coverage and called-for services, the principle of conspicuous presence as a means of crime prevention and preservation of the peace. Basic police responsibilities for the safe and efficient movement of vehicles and pedestrians and an in-depth study of traffic law.

CRJ171 _____ (3-0) 3 cr. hrs.**Community Policing & Problem Solving**

The study of police agencies response to the needs and demands of its citizens and the contrasting styles that vary from agency to agency. Concepts, themes, and programs advocated at the national level—by federal agencies, academics, and practitioners—are implemented with widely varying degrees of understanding.

CRJ172 _____ (3-0) 3 cr. hrs.**Comparative Criminal Justice Studies**

Prerequisite: CRJ110.

This course is a study of the various types of criminal justice systems and structures throughout the free world. Students will, on a first hand basis, view the interworkings of the three organized functions of the various criminal justice systems, i.e., police, courts, and corrections in specified foreign countries. The course will include several hours of orientation

and lecture at Mineral Area College, several days of travel and participation, and a written course synthesis.

CRJ173 _____ (2-0) 2 cr. hrs.**Comparative Criminal Justice Studies**

Same as CRJ172 except for variable credit.

CRJ180 _____ (3-0) 3 cr. hrs.**Introduction to Corrections**

An introduction to the correctional process from law enforcement through the administration of justice, probation, parole, prisons and other and correctional institutions.

CRJ182 _____ (3-0) 3 cr. hrs.**Corrections in America**

This course will review various theories of criminal causation and will provide a comparative study of global criminal justice systems. The focal point of this course is to provide the criminal justice student with a working knowledge of major correctional processes and the basic legal concepts that underlie the criminal justice field. This course will give the student some historical and judicial perspectives regarding corrections.

CRJ190 _____ (3-0) 3 cr. hrs.**Police Administration**

Prerequisite: CRJ110.

A study of the organization and administration of various police systems, the specialized characteristics of individual police organizations and police personnel, the responsibility of police organizations and police personnel, the responsibility of police departments. The most popular and prevalent ideals, principles and assumptions pertaining to police administration are presented utilizing a multidisciplinary orientation to analyze these concepts. Emphasis is placed on the impact that police administration exerts upon the policeman's functioning.

CRJ200 _____ (3-0) 3 cr. hrs.**Criminal Justice Report Writing**

Prerequisites: A grade of "C" or higher in all of the following courses: CRJ110, CRJ120, and ENG133 or consent of instructor.

The study and application of the process of effective criminal justice report writing. Proper formal written communications formats with an emphasis on report writing techniques requisites for the admissibility of evidence in a criminal adjudication.

CRJ212 _____ (3-0) 3 cr. hrs.**Police Photography**

Basic fundamental photography will be taught with an emphasis on manual and auto functions of the camera. The student will use these skills to photograph objectives detailing most situations occurring in real life crime-scene photography. Negatives and photos will be set in a photo book to be critiqued for quality and comparison. Court room qualifications will be the final determination of the students work and performance. This course helps prepare the student for CRJ214.

CRJ214 _____ (3-0) 3 cr. hrs.**Forensic Crime Scene Investigation**

Introduces the student to the fundamentals of on-site crime-scene investigations. Specific objectives will be combined with actual crime scene reconstruction. The student will perform practicals using photography skills, fingerprint identification and comparison, sketching, microscopy, dental stand, soil analysis and site identification for blood, hair, fibers, tool marks, and tire tread comparison. The student must perform with skill and integrity, in a mock trial submitting the mock prepared evidence in trial.

CRJ230 _____ (1-0) 1 cr. hr.
Criminal Justice Career Preparation

The preparation of the student for career employment with public safety agencies in the local area, region, and out-state. For students wishing to pursue a higher education in the criminal justice field, the course content will direct them to other colleges that can offer them the highest degree possible for public safety careers. Practicals, moot interviews, and portfolio creation will also be a requirement for student achievement in this course.

COMPUTER SCIENCE**CSC 130** _____ (3-0) 3 cr. hrs.
Video Game Design & Development (spring)

Prerequisite: CIS105 or CIS175, or consent of instructor.

Course examines the video game industry using an interdisciplinary approach to create PC-based games. Specialize in programming, graphics and animation, or creative documents, while learning the techniques and tools of game design. Design interactive and visual interfaces for games focusing on creating multimedia assets and developing basic programming abilities. Students may construct and animate 2D and 3D objects and creative game environments. The course culminates in the production of PC video games. (spring)

CSC 150 _____ (3-0) 3 cr. hrs.
BASIC Programming

Corequisite: CIS105 or CIS175, or consent of instructor.

A course in programming using the Visual BASIC language to develop the student's abilities and knowledge in solving problems using microcomputers. Students will learn how to code and debug, and execute Visual BASIC algorithms using an object-oriented approach.

CSC240 _____ (3-3) 3 cr. hrs.
Computer Programming in C++

Prerequisite: High school or higher level Algebra with a grade of "C" or better, or consent of the instructor. A previous computer course such as CIS105, Introduction to Computers or higher.

The study of program design and development using the structured language C++. Topics include language syntax and semantics, data and variable types, functions, and object oriented design. This course is intended as a first course in programming for students interested in computer programming.

CSC242 _____ 3 cr. hrs.
Java Script Programming

Prerequisite: CIS105 or CIS175

An introduction to programming in the JavaScript object scripting language. Basic commands and structures; variables; operators; inputs; conditionals. Add special features to web pages including user prompts. Create forms with data validation. Loops and built-in functions. Learn how to insert Java applets into web pages.

CSC244 _____ (3-0) 3 cr. hrs.
Web Programming with Perl/CGI/Linux

Prerequisite: CIS200 or a programming language such as Visual BASIC, Fortran, or C++.

Introduction to the Unix/Linux operating system with practical web programming applications using Perl scripting in the CGI (Common Gateway Interface).

CSC250 _____ 3 cr. hrs.
Advanced BASIC Programming (spring)

Prerequisite: CSC150.

Analysis of computational problems and

development of structured BASIC algorithms as solutions. Topics of study include: variable assignment, loops, subroutines, arrays, data files, string manipulations, etc. This course builds on the information presented in CSC150. Offered on demand.

DEAF COMMUNICATION STUDIES**DCS100** _____ 3 cr. hrs.
Sign Language I

This is a beginning course in sign language and communication with the deaf, offered for anyone who is interested in gaining knowledge about deafness and the sign systems used by the deaf. With an emphasis on conversational signing, students will learn fingerspelling, numbers, a basic sign vocabulary, and an understanding of deafness.

DCS101 _____ 3 cr. hrs.
Sign Language II

This course is a continuation of conversational signing emphasizing American Sign Language. The student will become more proficient in fingerspelling, increase sign vocabulary by approximately 800 signs, improve sign-to-voice skills and become aware of the ethics of interpreting.

EARLY CHILDHOOD EDUCATION**ECE100** _____ (3-0) 3 cr. hrs.
Intro to Early Childhood Education

The course is designed to introduce the student to the current theories and practices based on current research of theories in early childhood, birth to eight years. Curriculum choices will be identified as a result of studying current practices. The developmental ages and stages of development in all domains will be studied to identify developmentally appropriate practices and environments. An introductory method of observation and record keeping techniques will be identified in order to assess the child's growth and development in the learning environment.

ECE102 _____ (3-0) 3 cr. hrs.
Guiding Alternatives for Young Children

The use of positive child guidance techniques is identified to redirect the child's behavior. The child's healthy social and emotional development is applied in all areas of discussion and planning activities concerning the child's self-esteem and concept. The pro-social development of the child is developed through planning of activities and the child's environment. Childhood stresses will also be identified in order to provide support and understanding for the child and family.

ECE104 _____ (3-0) 3 cr. hrs.
Early Childhood Health, Safety and Nutrition

The child's health and safety concerns in the early care and education environments will be carefully examined through daily observation and planning. Early childhood illnesses, diseases, and the need for immunizations will be diagnosed in order to plan for a safe and healthy environment. The importance of establishing early health attitudes, values and habits in young children will be examined through planning of appropriate learning activities.

ECE120 _____ (3-0) 3 cr. hrs.
Caring for School Age Children

This course will focus on the development stages of children 5-12 years of age. The course will identify the developmental needs of children in an after-school program. A developmentally appropriate schedule of

events and activities will also be identified and implemented.

ECE200 _____ (Arr.) 3 cr. hrs.
Practicum Classroom Experiences

Prerequisite: ECE100

Theories and practices learned in ECE100 will be applied to the practicum experiences while planning for developmentally appropriate practice in the early childhood care and education setting. Activities and lesson plans will be used weekly in the practicum classroom experiences. Observation and assessment of the child's development will be recorded weekly to complete a final assessment of the child's growth and development. Student teacher experiences will be supervised in an accredited early child development school setting.

ECE202 _____ (3-0) 3 cr. hrs.
Emerging Language and Literacy

The course will explore the oral and written development of language, birth to age eight. The emerging language and literacy skills of the young child will be identified through the careful examination of research and theory of language development. Early learning experiences of the child in a print rich environment and language and interaction of the child's environment will be explored. Early intervention methods of possible speech and hearing problems will be addressed. Selection of developmentally appropriate reading materials will be explored through planning for the early language experiences. Family literacy will be established through a careful selection of reading materials.

ECE204 _____ (3-0) 3 cr. hrs.
Home, School, and Family

The course will help to define the role of the family and community in the early care and education setting. The study of sociological trends in today's family will be explored through current research of the family dynamics. The diversity of families will be determined in order to study the affects of the family in the early care and education setting. Communication techniques between the family and child care and education setting will be identified in order to provide a two-way communication system that will benefit the family, child, and teacher in the child's early learning experiences.

The interrelationship of family, school and community will provide the teacher with the knowledge of planning a successful program.

ECE212 _____ (3-0) 3 cr. hrs.
Intro to Young Children with Special Needs

The course is intended to provide the early child development provider/teacher with the early signs and indicators of learning, behavior, and/or physical disabilities of young children. Early intervention is stressed as part of recognizing the possible indicators of children with special needs. The course also discusses the elements of the inclusive environment. Modification of learning activities is explored through writing of lesson plans.

EDUCATION**EDU110** _____ (3-0) 3 cr. hrs.
Psychology of Adolescence

Prerequisite: Sophomore level or consent of instructor; an ACT composite of 20 or higher recommended.

An introduction to the developmental factors and issues to the period from puberty to adulthood with emphasis upon conditions leading to optimal development.

EDU123 _____ (3-0) 3 cr. hrs.**Introduction to Education**

Prerequisite: 15 semester hours of course work completed.

This course is the introductory level class for the sequence of education courses. Course content includes an examination of opportunities for today's teacher, an analysis of the contemporary school, and an exploration of today's student. Course experiences will include developing a portfolio, participating in 20 hours of field experiences, and examining additional educational requirements for becoming a certified teacher in the state. Students must pass a criminal background check before the end of the 4th week of the term.

EDU128 _____ (3-0) 3 cr. hrs.**Technology for Teachers**

Prerequisite: EDU123 or ECE100.

This course is designed for individuals who intend to major in education. Class assignments will focus on using computer technology for enhancing instruction. This course meets the MAC computer literacy requirement for education majors.

EDU130 _____ (3-0) 3 cr. hrs.**Child Development**

This course studies the development from conception through adolescence. It reviews theories related to the four areas of development: cognitive, physical, language, and social/emotional. It explores the relationships and effects of the environment on the developmental areas as they apply to the developing child. Brain research will be reviewed at each area of development. This will assist in the understanding of how the learning process is affected by the child's learning environment.

EDU145 _____ (3-0) 3 cr. hrs.**Classroom Strategies**

Prerequisite: EDU123.

This class examines essential skills for teachers at all academic levels. Classroom management and organization, behavior modification, motivation of students, and effective learning environments will be emphasized.

EDU202 _____ (3-0) 3 cr. hrs.**Children's Literature**

Prerequisite: EDU123 or ECE100.

This course is designed to acquaint the elementary teacher with strategies for promoting literacy in children, identifying criteria for selecting quality children's literature, and formulating techniques for using literature in the classroom.

EDU240 _____ (3-0) 3 cr. hrs.**Infant and Toddler Methods and Materials**

Prerequisite: EDU130.

The course examines the areas of development during a child's first three years of life. It examines the current theories and practices of the developmental domains during infancy and toddlerhood. The growth and development of the young child is applied through the use of developmentally appropriate active learning activities. An early childhood curriculum is used to determine the choices of developmentally appropriate activities and lesson plans. The student is challenged to meet the developmental needs by planning for the environment with appropriate materials and equipment. Observation of infants and toddlers during their daily routines and activities are documented and used to prepare the student for working with young children.

EDU242 _____ (3-0) 3 cr. hrs.**Organization and Management of Early Childhood Programs**

Prerequisite: EDU130.

The course emphasizes the operation and management of early childhood programs. The program goals, objectives and outcomes are evaluated in order to provide a quality program in order to meet the needs of the community. Issues related to staffing, curriculum, and program planning are identified as a part of the program's goals and outcomes. The focus of planning and budgeting for the learning environment is addressed through the assessment of staffing needs, program materials and equipment. The needs of the community are also assessed as a part of the planning process.

EDU260 _____ (1-0) 1 cr. hr.**Portfolio Assessment**

Prerequisite: 45 cr. hrs. or last semester of attendance.

This class is the capstone course in the education department's sequence of pre-professional teacher education courses. The portfolio is a required component of each DESE-approved teacher education program in the state, and students are accountable for successful completion of their portfolios. Course content will include a systematic analysis and review of each student's portfolio.

ELECTRICAL/ELECTRONIC TECHNOLOGY**EEE150** _____ (3-0) 3 cr. hrs.**Basic Electronics**

A study of basic electronic theory. OHM's Law as applied to D. C. and A. C. series and parallel resistance, inductance and capacitance circuits.

EEE155 _____ (3-0) 3 cr. hrs.**Electrical Systems**

An introductory study of basic alternating current theory, emphasizing voltage, reactance, resonance, single and three phase power, and network analysis.

EEE158 _____ (3-1) 3 cr. hrs.**Practical Electronics I, Motors and Generators**

Prerequisite: EEE150 or consent of instructor.

A combination lecture/laboratory course covering basic electrical/electronic fundamentals and the proper use of electronic test equipment. The course includes a study of inductance, capacitance, resonant circuits, motors and generators with hands-on laboratory experience.

EEE160 _____ (3-2) 3 cr. hrs.**Practical Electronics II**

Prerequisite: EEE158 or consent of instructor.

A continuation of EEE158, the course covers more complex circuits and applications of solid state devices including transistors, integrated circuit, OP-AMP's, SCR's multivibrators, timing circuits and logic circuits.

EEE171 _____ (3-0) 3 cr. hrs.**National Electrical Code**

Prerequisite: Consent of instructor.

A course designed to update electrical workers and electricians with the ever changing National Electrical Code.

EEE183 _____ (3-0) 3 cr. hrs.**Schematic Reading**

Instruction and lab experience leading to student being able to read and use electronic diagrams. These skills can be utilized in the process of maintenance and troubleshooting of electronic circuits equipment.

EEE186 _____ (3-0) 3 cr. hrs.**Digital Electronics and Applications**

Prerequisite: EEE150 or consent of instructor.

This course covers the four basic logic gate systems and flip-flops, binary and octal number systems, large scale memory circuits, ECH, MOS, and FTL circuits.

EEE191 _____ (3-0) 3 cr. hrs.**Electronic Servicing**

Prerequisite: MAT095.

Teach the basic principles of process automation and demonstrate the application of these principles in modern industrial practice. This is an introductory or first level course. The course is intended to be both theoretical and practical to show the basic concepts of process control theory and how these concepts are used in daily practice.

EEE194 _____ (4-0) 4 cr. hrs.**Digital Computer Electronics**

Prerequisite: EEE200.

Introduction to microprocessors and microcomputers. The emphasis will be on internal architecture and communication between processors and the outside world.

EEE197 _____ (3-0) 3 cr. hrs.**Programmable Logic Controllers**

Prerequisites: EEE194 and EEE200.

This course offers a learning opportunity that covers a wide range of the applications of electronics in the fields of automation and fluid power control. Programmable logic controllers are the brains controlling the majority of current automation.

EEE200 _____ (3-0) 3 cr. hrs.**Solid State Electronics**

Prerequisites: EEE160 or consent of instructor.

A study of semiconductor diodes and bipolar transistors. The course includes atomic physics fundamentals as it applies to semiconductor devices, rectifier circuits, bias and stabilization of various solid state circuits.

EEE202 _____ (2-0) 2 cr. hrs.**Basic Soldering Techniques**

Students will receive instruction and training in electronic soldering and wire wrapping techniques and in applying these skills in the repair of printed circuits, hard wired circuits.

EEE204 _____ (3-0) 3 cr. hrs.**Digital Electronics I**

Prerequisites: EEE150, EEE186, or consent of instructor.

An introduction to microcomputers and microprocessors; programming an 8080 microprocessor and tracing and building electronic microprocessor circuits.

EEE206 _____ (3-0) 3 cr. hrs.**Digital Instrumentation Electronics**

Prerequisite: EEE200.

A continuation of EEE204. More advanced computer circuits are bread boarded and the use of logic probes are used for troubleshooting bread board circuits, interfacing of OP-AMPS with A/D Convertors to computer circuits and the testing of these circuits.

ENGINEERING**EGN213** _____ (3-0) 3 cr. hrs.**Engineering Mechanics-Statics (fall)**

Prerequisites: PHS223 and MAT215.

This course covers the principles of mechanics as applied to problems in which the structures considered are in static equilibrium. The topics considered include the algebra of

vectors, force systems, friction, centroids and moment of inertia.

EGN222 _____ (2-0) 2 cr. hrs.
Engineering Mechanics-Dynamics(spring)
Prerequisite: Should be preceded by EGN213.

Application of the principles of mechanics to engineering problems of motion: force, mass, and acceleration, work and energy, impulse and momentum.

EGN223 _____ (3-0) 3 cr. hrs.
Engineering Mechanics-Dynamics(spring)
Prerequisite: Should be preceded by EGN213.

Application of the principles of mechanics to engineering problems of motion: force, mass, and acceleration, work and energy, impulse and momentum.

EGN234 _____ (4-0) 4 cr. hrs.
Introduction to Electrical Engineering (spring)

Prerequisites: PHS224 and preceded or accompanied by MAT225.

Circuit elements, signals, Kirchoff's laws, network theorems, mesh and nodal analysis, transient and complete response of RL, RC, and RLC circuits.

ENGLISH/COMMUNICATIONS

Results from the American College Testing (ACT) program, a Diagnostic Reading Test, and an evaluation of high school transcripts will determine those students subject to placement in the basic language skills courses.

Courses numbered ENG001 — ENG027 are offered as one-hour modules under the supervision of the Learning Center. These courses are offered as self-paced and/or independent study courses.

These courses will only be counted toward an Associate in General Studies degree. They do not meet any requirements in the English area for an AGS or an AA degree.

ENG001 _____ (Arr.) 1 cr. hr.
Personalized Reading (Reading Improvement)

Prerequisites: ACT score of 1-10 or Compass score of 1-52.

The Personalized Reading Module is designed to help the individual special needs student improve reading and study skills. Students are assigned work in needed areas which are determined by placement testing.

ENG002 _____ (Arr.) 1 cr. hr.
Personalized Reading II

Prerequisite: "C" or better in ENG001.

Course is designed to further improve students' reading skills.

ENG006 _____ (Arr.) 1 cr. hr.
Writing for Life Skills and Work

Instruction in effective communications in various kinds of writing used in everyday life, both on the job and in managing personal affairs.

ENG007 _____ (Arr.) 1 cr. hr.
College Reading

Prerequisites: ACT score of 11-16 or Compass score of 53-70.

One of three one-hour modules designed to help the student achieve proficiency in reading, study skills, and vocabulary. This course covers reading comprehension, reading interpretation, and improvement of reading speed. Open to all students.

ENG008 _____ (Arr.) 1 cr. hr.
Vocabulary Development I

Prerequisites: ACT score of 11-16 or Compass score of 53-70.

This course is designed to help students increase proficiency in recognition and meaning of words.

ENG009 _____ (Arr.) 1 cr. hr.
Study Skills

Prerequisites: ACT score of 11-16 or Compass score of 53-70.

Course stresses development of good study habits, awareness of study aids, note-taking, how to take examinations, and use of the library.

ENG010 _____ (Arr.) 1 cr. hr.
Spelling Improvement

A correlated individualized instruction program in spelling designed to teach students how to spell the thousands of words whose spelling is governed by common spelling rules. In addition, it teaches the student how and where to find information on how to spell troublesome words. Open to all students.

ENG013 _____ (Arr.) 1 cr. hr.
The Writing Process III — Content Areas

Students will be exposed to the various modes of writing as needed to be successful in courses related to science, history, literature, etc. This course will prepare students to write about different subjects on tests, in-class exercises, or for homework, emphasizing the variety of writing modes: short answers, paragraphs, summaries, and essays.

ENG014 _____ (Arr.) 1 cr. hr.
Reading and Critical Thinking I

This course prepares the students to read and think critically. It emphasizes ten critical thinking skills associated with reading and is designed for the student needing reinforcement in understanding the relationship between thought and reading.

ENG015 _____ (Arr.) 1 cr. hr.
Reading and Critical Thinking II

A continuation of Reading and Critical Thinking modules. This course is designed to teach students more advanced critical thinking skills associated with reading. It is for students needing additional reinforcement in understanding the relationship between thought and reading.

ENG016 _____ (Arr.) 1 cr. hr.
Vocabulary Development II

This course is a continuation of ENG008, if needed. It is designed to help students increase proficiency in recognition and meaning of words.

ENG017 _____ (Arr.) 1 cr. hr.
Cultural Literacy

This course is designed to introduce students to topics across the curriculum in cultural literacy. Subjects ranging from common English idioms and proverbs to major topics in literature, science, history, biography, and the arts are emphasized.

ENG018 _____ (Arr.) 1 cr. hr.
Focus on Literature

Teaches the transition between ordinary reading and the reading of literature with an emphasis on the skills needed to enjoy reading great works of literature.

ENG021 _____ (Arr.) 1 cr. hr.
Sentence Skills

Prerequisite: ACT English score 13 or below or Compass score of 1-30.

First of three modules in Learning Center's Basic Writing I course. Students learn the

basics of grammar, parts of speech, sentence patterns and proper usage of punctuation.

ENG022 _____ (Arr.) 1 cr. hr.

Parallel Structure in Writing
Prerequisite: Grade of "C" or better in ENG021.

Second of three modules in Learning Center's Basic Writing I course. This module emphasizes steps writers take to create a document: choosing a topic, organizing ideas, etc.

ENG023 _____ (Arr.) 1 cr. hr.
Punctuation and Clarity in Writing

Prerequisite: Grade of "C" or better in ENG022.

Third of three modules in Learning Center's Basic Writing I course. Students work on improving punctuation skills and their ability to write clear concise sentences.

ENG024 _____ (Arr.) 1 cr. hr.
Basic Principles of Effective Writing

Prerequisite: ACT English score 14 to 18, Compass score of 31-65, or a grade of "C" or better in ENG096 or ENG021, ENG022, and ENG023.

First module in Learning Center's Basic Writing II course. Students learn about pre-writing, outlining, revising, editing and proofreading their work. Includes review of sentence skills.

ENG025 _____ (Arr.) 1 cr. hr.
Paragraph Development

Prerequisite: Grade of "C" or better in ENG024.

Second module in Learning Center's Basic Writing II course. Reviews the patterns of paragraph development and places emphasis on purpose and audience of paragraphs. Also continues review of sentence skills.

ENG026 _____ (Arr.) 1 cr. hr.
Essay Development

Prerequisite: Grade of "C" or better in ENG025.

Third module in Learning Center's Basic Writing II course. Reviews important points in essay writing, how to plan an essay, and how to write exam essays. Continues the review of sentence skills.

ENG027 _____ (Arr.) 1 cr. hr.
English Grammar

Instructs students in proper usage of grammar.

ENG080 _____ (3-0) 3 cr. hrs.
English as a Second Language I

Prerequisite: TOEFL score of or below 550 (paper-based), 213 (computer-based), or 79 (internet-based).

An intensive course for international students, this class will offer a college-level review of grammar and vocabulary for ESL students, emphasizing target grammar concepts, sentences and paragraph structure, vocabulary, idioms and reading skills. This course is not applicable toward an Associate Degree.

ENG082 _____ (3-0) 3 cr. hrs.
English as a Second Language II

Prerequisite: TOEFL score above 550 (paper-based) or ESL I.

This course offers advanced instruction for non-native-speaking students in college-level English reading comprehension and writing. Students will read, discuss and analyze short stories, essays, poetry and magazine articles, as well as refine basic composition skills, including sentence, paragraph and essay-writing. This course is not applicable toward an Associate Degree.

**ENG090 _____ (3-0) 3 cr. hrs.
Reading Improvement**

Prerequisite: ACT score 0-10 or Compass Reading score of 1-52.

This course provides an opportunity to improve reading comprehension, reading speed and vocabulary skills. Designed for students reading below high school level.

**ENG091 _____ (3-0) 3 cr. hrs.
Introduction to Reading and Critical Thinking**

Designed to help students develop higher level reading and thinking skills needed for success in school, the workplace, and in their everyday lives. Emphasis is placed on cognitive levels of comprehension, interpretation, application, analysis, and evaluation.

**ENG096 _____ (3-0) 3 cr. hrs.
Basic Writing Skills I**

Prerequisite: ACT English score 0-13 or Compass Writing score of 1-30.

Basic Writing Skills I primarily emphasizes correct grammatical usage of the English language. The course concentrates on mechanics — e.g., agreement, sentence structure, punctuation, parallelism, etc. Paragraph writing is also studied. Does not apply toward AA degree.

**ENG097 _____ (3-0) 3 cr. hrs.
Basic Writing Skills II**

Prerequisite: ACT English score 14-18, Compass English/Writing score of 31-65, or a grade of "C" or higher in ENG096 or Learning Center Modules ENG021, ENG022 and ENG023.

Basic Writing Skills II primarily emphasizes efficiency in paragraph writing and diction. It includes a review of sentence structure, grammar, and punctuation. Does not apply toward AA degree.

**ENG099 _____ (3-0) 3 cr. hrs.
College Reading and Study Skills**

Prerequisite: ACT Reading score 11-16 or Compass Reading score of 53-70.

A refresher course in study activities necessary for success in college. It is designed to increase a student's reading efficiency by concentrating on improvements in vocabulary, comprehension, and reading rates. Notetaking, test-taking, and other study skills are taught as a regular part of the class. Open to all students. Does not apply toward AA degree.

**ENG100 _____ (1-0) 1 cr. hr.
Writing a Research Paper**

Designed to teach the student the procedure and mechanics of writing a research paper. Open to all students.

**ENG105 _____ (1-0) 1 cr. hr.
Use of Library Resources**

Designed to help students use the Learning Resources Center more effectively. Open to all students.

**ENG133 _____ (3-0) 3 cr. hrs.
English Composition I**

Prerequisite: ACT 19, Compass 66 or completion of ENG097 or modules with a "C" or above.

Designed to help the student write clearly and effectively. Emphasis is placed on mastery of writing skills necessary to the student's education and career. Subject matter includes library study, grammar, punctuation, usage, sentence structure, and various patterns of organizing and developing paragraphs and essays.

**ENG134 _____ (3-0) 3 cr. hrs.
English Composition II**

Prerequisite: ENG133 with a grade of "C" or better.

A continuation of ENG133, with emphasis on longer papers and different types of writing, including argument and persuasion. Study is devoted to documentation and preparation of the research paper as well as an introduction to critical writing.

**ENG135 _____ (3-0) 3 cr. hrs.
English Composition II (Honors)**

Prerequisite: ENG133 with a grade of "B" or better and consent of the instructor.

A continuation of ENG133 for students demonstrating above-average ability in English composition. Emphasis is on longer papers, individual research, independent study, and critical and creative thinking.

**ENG136 _____ (3-0) 3 cr. hrs.
Creative Writing**

Prerequisite: ENG133 with a grade of "C" or better.

A course in which the student will practice the rudiments of creative writing. Units studied will focus on writing original poetry, prose, and drama.

**ENG143 _____ (3-0) 3 cr. hrs.
Exposition**

Prerequisite: ENG133 with a grade of "C" or better.

A course in critical, analytical, and explanatory writing. Short writing assignments focus on particular problems in expository writing, such as description, casual analysis, and classification. Other assignments include a critical analysis of a short literary work, a review of a film or play, and a research project.

**ENG144 _____ (3-0) 3 cr. hrs.
Public Speaking**

A course that emphasizes effective communication in public situations through the design and delivery of informal speeches, open forum discussions, and practice in impromptu and extemporaneous speaking.

**ENG146 _____ (3-0) 3 cr. hrs.
Argumentation and Debate**

A course which covers the principles and ethics of persuasion, persuasive speaking, parliamentary procedure, and debate. Includes experience in a mock senate session and court trial.

**ENG157 _____ (3-0) 3 cr. hrs.
Introduction to Literature: Prose, Poetry and Drama**

An introductory survey of the prose forms of literature, primarily short story, novel and drama, as well as the basic methods of poetry. Special attention is given to literary forms and terminology. Emphasis is also placed on developing skills in critical reading and the attitude needed for appreciating serious literature. This is a reading intensive course.

**ENG167 _____ (3-0) 3 cr. hrs.
Interpersonal Communications I**

A "whole person" approach to oral communication between individuals using empathy, personal awareness, concern for others, and respect for individual differences. Will engage in "what if" discussions of everyday situations as well as emotionally sensitive interactions. Focus will be placed on thinking about the "how" and "why" of person-to-person contact. Open to all students.

**ENG200 _____ (3-0) 3 cr. hrs.
Interpretation of Literature**

Prerequisite: ENG133 with a grade of "C" or better.

Students will study prose, fiction, poetry, and drama primarily from three points of view: literary analysis, individual performance, and adaptation. This is a reading intensive course.

**ENG212 _____ (3-0) 3 cr. hrs.
Literary Masterpieces I**

Prerequisite: ENG133 with a grade of "C" or better.

A study of selected masterpieces of Western literature from ancient Greece and Rome through the Renaissance. Emphasis is placed on ideas and themes of interest to cultures of various ages, past and present. This is a reading intensive course. (Cultural diversity course.)

**ENG215 _____ (3-0) 3 cr. hrs.
Leadership Development**

Prerequisite: ENG133.

This course has as its central focus the development of leadership ability. The course provides a basic understanding of leadership and group dynamics theory and assists the participant in developing a personal philosophy of leadership, an awareness of one's own ability and style of leadership; it provides the opportunity to develop essential leadership skills through study and observation of the application of these skills.

**ENG233 _____ (3-0) 3 cr. hrs.
English Literature I**

Prerequisite: ENG133 with a grade of "C" or better.

A survey study of major authors and their works from the early Middle Ages through the eighteenth century. Major figures studied include Chaucer, Shakespeare, Milton and Pope. Requirements include three or four examinations over the major time periods and one critical paper. This is a reading intensive course.

**ENG234 _____ (3-0) 3 cr. hrs.
English Literature II**

Prerequisite: ENG133 with a grade of "C" or better.

A survey study of major authors from the nineteenth century Romantic writers through the twentieth century. Authors studied include Austen, Wordsworth, Byron, Tennyson, Browning, Yeats, Conrad, Joyce, and Orwell. Requirements include tests on each period and one literary analysis. This is a reading intensive course.

**ENG243 _____ (3-0) 3 cr. hrs.
American Literature I**

Prerequisite: ENG133 with a grade of "C" or better.

The primary purpose of this course is to help students understand and appreciate early American literature. Covering the Puritan Period, Revolutionary Period, and Romantic Period, nonfiction essays, journals, short stories, and poetry will be studied. Classes are discussion oriented, with lectures provided to introduce historical information, facts about the authors, and terminology peculiar to particular periods and genres. This is a reading intensive course.

**ENG244 _____ (3-0) 3 cr. hrs.
American Literature II**

Prerequisite: ENG133 with a grade of "C" or better.

The primary purpose of this course is to help students understand and appreciate American literature from the late nineteenth century to the late twentieth. Specific periods covered are the Realistic/Naturalist Period, Modernist Period, and Post-Modernist Period. Classes are discussion oriented, with lectures provided to introduce historical information, facts about the authors, and terminology

peculiar to particular periods and genres. This is a reading intensive course.

ENG246 _____ (3-0) 3 cr. hrs.

Readings in Short Fiction

Prerequisite: ENG133 with a grade of "C" or better.

A course focusing on reading short stories, poetry, and novellas. Instruction in interpretative criticism and stylistic explication of assigned work with emphasis on elements of style and discussion of themes. This is a reading intensive course.

ENG250 _____ (3-0) 3 cr. hrs.

Multicultural Literature

This course is designed to give students an introduction and appreciation to other cultures different from their own through the reading of stories and poetry by authors who represent various worldwide cultures. Short papers will be required. This is a reading intensive course and meets the cultural diversity requirement. (Cultural diversity course.)

ENG253 _____ (3-0) 3 cr. hrs.

Young Adult Literature

A course engineered for secondary education majors with course content focusing on poetry, prose, and novels for young adults. Special attention is given to literary forms and terminology. Emphasis is also placed on developing skills in critical reading and the attitude needed for understanding and appreciating literature. The course satisfies one of the college's cultural diversity humanities requirements. (Cultural diversity course.)

FIRE SCIENCE

FST101 _____ (Arr.) 3 cr. hrs.

Fire Fighter I

Fire Fighter I develops the knowledge and skills expected of firefighters. Twenty-five units cover topics often encountered at fire incidents. Combined with Fire Fighter II (FST201), the participant will meet the requirements for Missouri Division of Fire Safety certification testing.

FST103 _____ (Arr.) 6 cr. hrs.

Fire Science Technology

Fire Fighter I and II (combined) are designed to prepare the student in the first phase of classroom instruction for fire fighter certification through the Missouri Fire Marshal's Office. The required disciplines for a state license are instructed. Student must pass classroom instruction and must pass practicals with 80% proficiency.

FST108 _____ (Arr.) 1 cr. hr.

Self-Contained Breathing Apparatus

This course is designed by demonstration of the use of SCBA functions for all purposes of safe fire fighting and the importance of personal safety to retrieve of fires and smoke.

FST111 _____ (Arr.) 1 cr. hr.

Vehicle Fire-Fighting

This course covers different types of vehicle fires, engine interior and exterior. The hazards and proper equipment and procedure to properly and safely extinguish vehicle fires will be the major topics.

FST115 _____ (Arr.) 1 cr. hr.

Pump Operations

Prerequisite: Fire Fighter II. Math and Unified Technical Concepts I are recommended.

Pump Operations traces the history of fire service pumps, develops the theory of operations and develops practical skills in the operation of fire service pumps.

FST120 _____ (Arr.) 1 cr. hr.

Fire Prevention

Prerequisite: Fire Fighter I and II

Fire Prevention introduces the student to basic inspection procedures, general fire safety, and occupancy classifications for courtesy inspections by fire departments. It is a preparation for the Division of Fire Safety Inspector certification course.

FST131 _____ (Arr.) 1 cr. hr.

Emergency Vehicle Driving

Emergency Vehicle Driving covers the topics of regulations, physical forces, safe operation and maintenance of vehicles used in the fire and emergency vehicle services. Practical exercises develop skills used in responding to every incident.

FST133 _____ (Arr.) 1 cr. hr.

Ropes and Rappelling

Ropes and Rappelling develops knowledge of ropes and vertical rescue techniques into practical application. Participants will become proficient in tying knots, rigging rope rescue systems and caring for rope equipment. This course is a component of Rescue Technician skills.

FST134 _____ (Arr.) 1 cr. hr.

Foam Applications

Foam Applications expands on the participant's knowledge of foam agents, types of foam, foam properties, equipment and systems. Practical skills include the preparation of solutions, equipment and the application of foam to fires.

FST136 _____ (Arr.) 1 cr. hr.

Salvage and Overhaul

The salvage component of this course expands the participant's ability to protect property before or during a fire. The overhaul component increases the skills used in locating hidden sources of ignition.

FST137 _____ (Arr.) 1 cr. hr.

Ventilation

Ventilation will develop the participant's ability to change the atmospheric conditions within a structure or area using the concepts of positive, negative, and hydraulic theory of ventilation.

FST138 _____ (Arr.) 1 cr. hr.

Water Supply

Sources of water, supply systems and moving water increases the participant's ability to provide water at the fire scene.

FST139 _____ (Arr.) 1 cr. hr.

Natural Cover Fires

Natural Cover Fires covers the concepts of weather and geographic factors, equipment, tactics and safety related to this specialized fire suppression skill. Certification to national standards may be possible at the conclusion of the course.

FST140 _____ (Arr.) 1 cr. hr.

Industrial Fire Brigade

Industrial Fire Brigade is designed to meet the needs of fire suppression and personnel safety in industrial settings. The knowledge and skills developed in this course will contribute to employability in some situations.

FST142 _____ (Arr.) 2 cr. hrs.

Hazardous Mat/Receiving Handling

This course will provide the basic information needed to handle a hazardous materials incident, including legalities, identification, transportation, scene management, containment, and finalization of the incident.

FST150 _____ (Arr.) 1 cr. hr.

Vehicle Extrication - Special

Vehicle extrication addresses the specialized topics of removing victims from special vehicles. This course will cover the specifics of the methods of extricating victims from all types of special vehicles and the nomenclature to act quickly in an emergency.

FST151 _____ (Arr.) 1 cr. hr.

Vehicle Extrication - Big Rig

This course will instruct and demonstrate continuation of the extrication course involving big rigs. Those vehicles are larger than passenger and may cover commercial, oversized work vehicles, dump trucks, construction, busses, trailers, and 18 wheelers.

FST152 _____ (Arr.) 1 cr. hr.

Vehicle Extrication - Passenger

Vehicle extrication addresses the specialized topics of removing victims from passenger vehicles. This course will cover the specifics of the methods of extricating victims from all types of passenger vehicles. The tools necessary for the special removal of passenger vehicles will be utilized under the directions of qualified instructors. New car instruction will be given strongly considering air bags and all new dangers to look out for.

FST160 _____ (Arr.) 1 cr. hr.

Training Operations in Small Departments

This course is designed to provide the students with the essential tools and skills to lead and manage a training program in a small department.

FST162 _____ (Arr.) 1 cr. hr.

Managing Company Tactical Operations

The course provides an effective approach to meet the needs of company officers responsible for managing the operations of one or more companies in structural fire fighting operations.

FST163 _____ (Arr.) 1 cr. hr.

Principles of Building Construction/Non-Combustible

This course addresses the need for fire service incident commanders to understand building construction and fire resistant requirements in order to conduct fire scene operations safely and make sound strategic decisions.

FST164 _____ (Arr.) 1 cr. hr.

Shaping the Future

This course provides students with an understanding of concepts, functions, and responsibilities at the intermediate level, as well as issues affecting mid-level management personnel in the fire service.

FST201 _____ (Arr.) 3 cr. hrs.

Fire Fighter II

Fire fighter II further develops the knowledge and skills expected of firefighters leading teams on assigned tasks. Combined with Fire Fighter I (FST101), the participant will meet the requirements for Missouri Division of Fire Safety certification testing.

FST203 _____ (Arr.) 2 cr. hrs.

Search and Rescue

Search and Rescue develops knowledge and skills necessary in locating and assisting individuals in non-structural settings. Outdoor, water and ice rescues are included. This course is a component in becoming a Rescue Technician.

FST205 _____ (Arr.) 2 cr. hrs.**Vehicle Extrication**

Vehicle Extrication addresses the specialized topics of removing victims from vehicles other than those used for private purposes. Bus, road tractors and farm equipment are included in the course.

FST207 _____ (Arr.) 1 cr. hr.**Fire Service Hydraulics**

Prerequisite: Fire Fighter II, and math credit. Principles of Technology is highly recommended.

Fire Service Hydraulics addresses the topics of water supplies, hydraulic theory, fire-ground flow, friction loss, and pump discharge. The course is intended for the experienced fire fighter working toward engineer.

FST209 _____ (Arr.) 1 cr. hr.**Vertical Rescue**

Prerequisite: FST133

This course is designed to advance the knowledge and skills introduced in Ropes and Rapelling. Organizational procedures, self rescue, and victim rescue skills will enable the participant to work safely and effectively as a member of a vertical rescue team.

FST211 _____ (Arr.) 1 cr. hr.**Advanced Vertical Rescue**

Prerequisite: FST209

Using advanced vertical rescue developing additional technical skills necessary to participate in a rope and technical rescue team. Skills include load distributing systems, high line systems, ropes based raising systems, and litter attendant.

FST213 _____ (Arr.) 2 cr. hrs.**Introduction to Fire Inspections, Principles and Practices**

This course helps new fire inspectors understand the scope of knowledge required and identifies the various steps in the inspection procedures.

FST214 _____ (Arr.) 3 cr. hrs.**Technical Principles and Practices of Fire Prevention**

This course provides a broad framework for individuals who have little or no experience in fire inspections. This frame of reference will help the new inspector to understand the scope of knowledge required and to identify the various steps in the inspection process.

FST215 _____ (Arr.) 1 cr. hr.**Principles of Building Construction/ Combustible**

This course is designed to provide knowledge about the classification system of buildings, the importance of fire resistance for structural support elements, and the risks associated with performing fire suppression activities inside and around buildings involved in fire.

FST216 _____ (Arr.) 1 cr. hr.**Introduction to Wilderness Search and Rescue**

This course will introduce students to wilderness search and rescue and the skills needed to identify, size up and implement a wilderness search.

FST217 _____ (Arr.) 1 cr. hr.**Wilderness Search and Rescue**

A continuation of FST216 with the exception of advanced course instruction. Practicals may be added to this course section as a method of instruction.

FST218 _____ (Arr.) 1 cr. hr.**Advanced Wilderness Search and Rescue**

Again, a continuation from FST 216 and FST217. Advanced, difficult, and stressors are added to the instructional practicals to realistically give true situations to objectively solve.

FST222 _____ (Arr.) 1 cr. hr.**Managing in a Changing Environment**

The course will focus on the four major areas having an impact on the future of fire service, economic, social, political, and technological influences.

FST230 _____ (Arr.) 3 cr. hrs.**Fire Investigation**

Fire Investigation addresses the information necessary to determine the cause and origin of a fire. Successful completion of the course may prepare the participant to take the Division of Fire Safety certification examination.

FST232 _____ (Arr.) 1 cr. hr.**Incident Command System: Basic**

This course is designed to introduce and define the incident command system and its evolution into an effective system for emergency management that is used in emergency situations that include fires, hazmat, and natural disasters. The course will be conducted in compliance with the Federal Emergency Management Institute and the National Fire Academy.

FST233 _____ (Arr.) 1 cr. hr.**Incident Command System: Intermediate**

The course provides information for personnel from agencies other than first response agencies and how they will be called upon to work under the incident command system. Large events will be emphasized.

FST234 _____ (Arr.) 1 cr. hr.**Incident Response to Terrorism**

Within the fire fighter instruction is introduced the Homeland Security courses necessary for fire fighters to respond to expected and unexpected forms of terrorism. Instruction will include the prepared terrorism response methods supplied by the Homeland Security Offices from the Federal and Missouri State Governments.

FST235 _____ (Arr.) 1 cr. hr.**Incident Command System: Advanced**

This course is intended to train personnel who maybe assigned to large incidents in the critical aspects of major incident management and area command.

FST236 _____ (Arr.) 1 cr. hr.**Drug Lab Awareness Operations**

This course presents the physical conditions, human activities and hazardous materials commonly found at clandestine drug labs in a variety of locations. The awareness section of this course will focus on discovering the presence of the illegal lab, applicable laws and regulations, and actions to reduce risk to emergency responders. Operations will focus on actions available to or mandated for operations level responders which review awareness level response. Defining and recognizing high risk and low risk work zones, actions plan development for command centers, isolation, decontamination, triage, mitigation, and documentation will also be exercised.

FST238 _____ (Arr.) 1 cr. hr.**Rapid Intervention Teams**

This course will address various techniques including, how to drag a downed fire fighter, SCBA change profile, removing a SCBA from a fire fighter, lowering a fire fighter to

safety. Safety awareness for low profile ladder escapes will be conducted during the hands-on skills portion of this course.

FST240 _____ (Arr.) 2 cr. hrs.**Hazardous Materials Operations**

This course meets the objectives of NFPA 472 and OSHA 29CFR1910.120. Topics include laws and standards of hazardous materials, identifying placards and containers, recognizing when there is the presence of a hazardous material, understanding materials safety data sheets and shipping papers, and using the North American Emergency Response Guidebook.

FST242 _____ (Arr.) 1 cr. hr.**Hazardous Materials Awareness**

A continuation of FST240 with the exception of applied classroom instruction onto a practical course of instruction. The student will participate under expected requirements for proper wearing of equipment and safety issues.

FST250 _____ (Arr.) 3 cr. hrs.**Fire Instructor I**

Prerequisite: Fire Fighter I and II and a computer technology course.

Course introduces and develops knowledge and skills used to teach essential skills to fire fighters. Instructional planning, psychology, presentations and evaluating results are supplemented with safety, legal considerations and training aids.

FST252 _____ (Arr.) 3 cr. hrs.**Fire Officer I**

Course introduces and develops supervisory and management skills for the company officer. Organizational structure, communications, career development, fire ground supervision, safety and health and liability issues are included in the course.

GEOGRAPHY**GEO001 _____ (Arr.) 1 cr. hr.****Introduction to Geography**

Designed to prepare students for college level geography courses. Offered as a self-paced and/or independent study module through the Learning Center. Does not apply toward an AA degree.

GEO114 _____ (3-0) 3 cr. hrs.**Regional World Geography I**

An introductory survey of the physical, cultural, economic, and political geography of the world's developed (Anglo-America, Europe, former USSR, Japan, Australia, New Zealand) regions.

GEO115 _____ (3-0) 3 cr. hrs.**Regional World Geography II**

An introductory survey of the physical, cultural, economic, and political geography of the world's developing (Latin America, Middle East, Asia, Sub-Saharan Africa) regions.

GUIDANCE**GUI100 _____ 3 cr. hrs.****Principles of College Success**

A course designed to make entering college comfortable and successful for first-time college students. A lively class format includes class discussions, guest lecturers and group activities on a wide range of subjects pertinent for school, career and personal success.

HISTORY

For students in the Arts & Science Division, the legal requirement in U.S. and state government and the history of American institutions may be met by completing six hours in the following combinations:

- 1.American History I & II (HIS123 and HIS124 or Honors Section HIS137 and HIS138).
- 2.American National Government and American State and Local Government (POS113 and POS114).
- 3.American History I and American National Government or American State and Local Government (HIS123, and POS113 or POS114).
- 4.American National Government and American History I or II (POS113 and HIS123 or HIS124).

HIS001 _____ (Arr.) 1 cr. hr.
Introduction to American History I
This is an independent study preparatory module for academic level HIS123. Does not apply toward an AA degree.

HIS002 _____ (Arr.) 1 cr. hr.
Introduction to American History II
This is an independent study preparatory module for academic level HIS124. Does not apply toward an AA degree.

HIS110 _____ (3-0) 3 cr. hrs.
World Civilization I
A multi-cultural and comparative survey of the development of major world civilizations from the ancient period until 1500. (Cultural diversity course.)

HIS113 _____ (3-0) 3 cr. hrs.
Western Civilization I
A study of the evolution of Western Civilization from the development of the earliest civilizations to the Age of Absolutism. (Cultural diversity course.)

HIS114 _____ (3-0) 3 cr. hrs.
Western Civilization II
A study of the main problems of the western world from the Age of Absolutism to the present time. (Cultural diversity course.)

HIS115 _____ (Arr.) 3 - 6 cr. hrs.
Western Civilization III
A seminar in the cultures of the countries of Europe and/or the British Isles and/or the "cradles" of Western Civilization. Offered on demand.

HIS118 _____ (3-0) 3 cr. hrs.
Introduction to Church History
An introductory survey of the early development of the Christian Church during antiquity and the early Middle Ages.

HIS119 _____ (3-0) 3 cr. hrs.
History of Christianity
A study of the development of Christian thought and institutions from late antiquity through the Reformation and beyond.

HIS123 _____ (3-0) 3 cr. hrs.
American History I
A survey of the political, economic, constitutional, diplomatic, social and cultural developments of the United States through the Reconstruction period. Partially fulfills Missouri state law requiring instruction in U.S. and Missouri constitutions. Requirements are listed at the beginning of this section.

HIS124 _____ (3-0) 3 cr. hrs.
American History II
A survey of the political, economic, constitutional, diplomatic, social and cultural developments of the United States from the Reconstruction period to the present. Partially fulfills Missouri state law requiring instruction in U.S. and Missouri constitutions. Requirements are listed at the beginning of this section.

HIS130 _____ (3-0) 3 cr. hrs.
History of Missouri
A survey of the history of Missouri from the earliest times to the contemporary period.

HIS135 _____ (Arr.) 1 cr. hr.
Directed Studies in History (Honors)
Prerequisite: Consent of the department chairperson/instructor.
The student enrolled for directed studies will investigate a specific topic or area within the field of history.

HIS136 _____ (3-0) 3 cr. hrs.
Introduction to Latin American History
A survey of economic, political and social developments in Latin America 19th Century to the present. (Cultural diversity course.)

HIS137 _____ (3-0) 3 cr. hrs.
American History I (Honors)
Prerequisite: Consent of the chairperson of the department.
An analysis of the important events in American history from the discovery of America through the Era of Reconstruction. Emphasis is on individual research, independent study, classroom discussion and oral reports.

HIS138 _____ (3-0) 3 cr. hrs.
American History II (Honors)
Prerequisite: Consent of the chairperson of the department.
An analysis of the important events in American history from the Era of Reconstruction until the present. Emphasis is on individual research, independent study, classroom discussion and oral reports.

HIS150 _____ (3-0) 3 cr. hrs.
Modern Latin America
A study of the cultures of the nations of Middle America, South America and the Caribbean. (Cultural diversity course.)

HIS152 _____ (3-0) 3 cr. hrs.
World Civilization II
A multicultural and comparative survey of the development of major world civilizations from approximately 1500 until the present. (Cultural diversity course.)

HEALTH

HLT003 _____ (Arr.) 1 cr. hr.
Orientation to Medical Terminology
Designed to teach the fundamental structure of many medical words and their pronunciation and spellings. Independent and/or self-paced instruction offered through the Learning Center. Does not apply toward an AA degree.

HLT007 _____ (Arr.) 1 cr. hr.
Orientation to Medical Terminology II
Continues instruction in fundamental structure of many medical words, a supplement to professional nursing programs. Independent and/or self-paced instruction offered through the learning center. Does not apply toward an AA degree.

HLT103 _____ (Arr.) 7 hours
Long-Term Nurse Aide
Prerequisite: ACT reading score of 13 or Compass reading score of 60.
Prepare the student for employment in a long-term care facility. This is a 180-hour course that consists of 75 cr. hrs. theory and 105 on-the-job training hours.
The course is designed to teach skills in patient care which will qualify the student to assist the Licensed Practical Nurse or the

Registered Professional Nurse in direct patient care.

The student will be given instruction on how to perform uncomplicated nursing procedures. Must pass state approved exam to practice.

HLT162 _____ (Arr.) 3 cr. hrs.
Long-Term Care Administration: Internship
Prerequisites: Sophomore standing, Hospital Organization and Administration, approval of the instructor and health care administrator.

To principally facilitate and in some cases to provide continuing academic instruction in the management of short-term health care facilities. Students analyze and observe management methods used in each department of the short-term health care facility.

HLT164 _____ (Arr.) 3 cr. hrs.
Short-Term Health Care Administration: Internship
Prerequisites: Sophomore standing, Hospital Organization and Administration, approval of the instructor and health care administrator.

To principally facilitate and in some cases to provide continuing academic instruction in the management of short-term health care facilities. Students analyze and observe the management methods utilized in each department of the short-term health care facility.

HLT166 _____ (Arr.) 3 cr. hrs.
Supervision and Management in Short-Term Care
This course is designed to present a "micro" view of hospitals as the major entity in the health care system.

HLT168 _____ (Arr.) 3 cr. hrs.
Long-Term Care Administration
Emphasis is on the long-term care facility. Patient care orientation is specifically covered in addition to the social, medical, and psychological aspects of long-term care.

HLT171 _____ (Arr.) 3 cr. hrs.
Emergency Medical Refresher Course
Prerequisites: Completed a state approved E.M.T. program.
A refresher/recertification course to enhance the knowledge and experience of the recertifying EMT-B.

The course is designed to assure maintenance of a uniformly high level of proficiency in skills and training among the EMTs and keep their training and competency equivalent to those of the basic level graduate.
Twenty-four clock hours of in-hospital training and observation are required in at least one of five areas of emergency medical services. Also, 24 cr. hrs. of field training in pre-hospital care is required.

HLT175 _____ (Arr.) 8 hours
Emergency Medical Technician-Basic
Prerequisite: ACT reading score of 13 or Compass reading score of 60.

Provides the basic instruction for persons responsible for the delivery of emergency medical services. In addition to the 110 hours of classroom instruction, two 12-hour emergency department rotations, and three-12-hour ambulance rotations are required. Successful completion of a practical exam and a written exam will allow the student to be enrolled in the National Registry of EMT's and apply for a Missouri State EMT license.

HLT195 _____ (Arr.) 1 cr. hr.
Level 1 Medication Aide
Prerequisite: Employed in a Residential Care Facility I or II.

This course follows the requirements of Missouri Rule 13 CSR 15-13.030. The

course will prepare individuals with the skills in medication administration of non-parenteral medications in order for the student to qualify to perform medication procedures in Residential Care Facilities I or II with the State of Missouri.

**HLT201 _____ (Arr.) 1 cr. hr.
Insulin Administration**

Prerequisite: Must be a Certified Medication Technician.

This class contains basic information about diabetes, its symptoms, treatment and complications. The unit also contains a lesson on insulin and a demonstration lesson on insulin injection.

**HLT202 _____ (Arr.) 4 cr. hrs.
Medication Technician**

Prerequisite: Must be Certified Nurse Aide and have a high school diploma or GED.

This is a course intended to increase the skills of a Nurse Aide and enable them to administer medications in a nursing home. The student is taught all aspects of medication administration except the parenteral route. The course covers 60 hours of theory and the student must have 8 hours supervised administration of medications in a nursing home.

**HLT235 _____ (3-0) 3 cr. hrs.
Medical Terminology and Introduction to Pathology**

This course is concerned with work analysis of medical terms. The general structure and function of body systems and some common pathological conditions will be covered.

**HLT236 _____ (3-0) 3 cr. hrs.
Medical Terminology II**

Prerequisite: HLT235.

This course is a continuation of HLT235. It is a course of individualized instruction to increase the working knowledge of medical terminology.

**HLT240 _____ (Arr.) 3 cr. hrs.
Intravenous Therapy**

Prerequisites: LPN with current license in Missouri, Practical Nursing student, or radiology student.

Prepare students to perform I. V. therapy. The course is designed to teach knowledge, skills, competencies and administration of intravenous therapy, which will qualify the Licensed Practical Nurse to perform this procedure safely within the limits defined by the Missouri State Board of Nursing.

HUMAN SERVICES

**HMS100 _____ (3-0) 3 cr. hrs.*
Introduction to Human Services**

A survey course to introduce students to human and community needs and to the concepts, skills and values common to the helping profession. It is designed for the student who wants to explore a possible major in the human services field. Students will be exposed to historical perspectives, ethics, community resources, and service delivery as well as the role of the paraprofessional in various agencies and specific areas of human services employment. (Transferrable as the first Social Work course to most area colleges).

**HMS101 _____ (3-0) 3 cr. hrs.*
Theories and Skills in Helping**

Introduction to the methodology used in the helping profession with emphasis on effective interpersonal communication, interviewing, and development of basic helping skills. A process-oriented approach to solving

individual, family, and community problems will be employed.

**HMS102 _____ (3-0) 3 cr. hrs.*
Policy and Politics**

Provides an examination of social welfare policy development. The examination will focus on historical factors, value assumptions, and social-political-economic contexts. Specific social issues in the field of human services will be explored and related to policy development. The processes and skills necessary for examination and evaluation of programs/policies (i.e., federal, state, local) will be emphasized.

**HMS103 _____ (3-0) 3 cr. hrs.*
Assessment and Documentation Practices**

Prerequisite: ENG133 or consent of instructor.

An introduction to the techniques of behavioral observation and documentation used in both professional and paraprofessional settings. Students will maintain and manage a case file, demonstrate different types of recording, examine and discuss guidelines for confidentiality of documents and information, and become familiar with writing objectives and identifying intervention strategies.

**HMS111 _____ (3-0) 3 cr. hrs.*
Group Practice in Human Services**

Prerequisites: HMS100 and HMS101 recommended.

An introductory course in the theory and practice of group work in Human Service settings. A study of the various types of groups, ethical issues, group leadership and the process/dynamics of forming and working with groups will be covered. Participation in a growth group as both member and facilitator is required.

**HMS201 _____ (Arr.) 3 cr. hrs.*
Human Services: Practicum I**

Prerequisites: A grade of "C" or better in HMS100 and HMS101, and permission of practicum coordinator are required. A practicum liability insurance fee is also required for enrollment in this course.

Offers an opportunity for students to gain field experiences appropriate to their career goals in selected settings. These settings may include social, educational, public and private health agencies, or other community organization. It is supervised jointly by a member of the college faculty and a member of the agency staff. This course requires students to spend 192 contact hours per semester (12 per week) for practicum work experience. Includes one hour-long seminar group each week to discuss and process the practicum experience.

**HMS202 _____ (Arr.) 3 cr. hrs.*
Human Services: Practicum II**

Prerequisites: A grade of "C" or better in HMS201 and permission of practicum coordinator are required. A practicum liability insurance fee is also required for enrollment in this course.

Provide students with continued fieldwork opportunities to integrate classroom and textbook knowledge in addition to experiences from the first practicum. Consisting of 192 contact hours in a setting appropriate to the students' career goals, the course includes one hour-long seminar group each week to discuss and process the practicum experience.

*Designates core courses that are required for the Human Services Program. Other courses may be taken as an elective.

HORTICULTURE

**HRT101 _____ (5-0) 5 cr hrs.
Introduction to Horticulture (fall)**

A course designed to explore the basic principles of horticulture and methods of practical application of these principles. Subjects such as plant propagation, taxonomy, and growth & development are presented in a comprehensive yet understandable manner. Includes land and greenhouse applications.

**HRT103 _____ (3-0) 3 cr hrs.
Mathematics for Horticulture (Web)**

A course in horticulture application of mathematics. The study will include treatment of measured data, applications of geometry and basic algebra. Practice sets will include word problems taken from actual horticulture situations.

**HRT105 _____ (3-0) 3 cr hrs.
Herbaceous Landscape Plants (spring)**

A study of major plants – annuals, perennials, bulbs, herbs and wildflowers that grow in the landscape garden. Identification, scientific name, growth habits and functional uses will be stressed.

**HRT107 _____ (3-0) 3 cr hrs.
Plant Propagation (spring)**

An introduction to common methods of commercial plant reproduction including seeds, cuttings, layering, grafting, and division. The course makes use of the greenhouse propagation facilities.

**HRT109 _____ (3-0) 3 cr hrs.
Woody Plants I (fall)**

A study of trees with regard to their identification, scientific name, growth habits and landscape values. Major emphasis is given to the development of a functional use concept in planting.

**HRT111 _____ (3-0) 3 cr hrs.
Woody Plants II (spring)**

A study of shrubs, vines and ground covers with regard to their identification, scientific name, culture, growth habit and landscape value. Special concern is given to the cultural aspects of proper planting in functional landscape design.

**HRT115 _____ (3-0) 3 cr hrs.
Applied Plant Pest Management (fall)**

A study of insects with special reference to taxonomy, life cycle, economic important and management. Insects that impact the agriculture/horticulture industry of Eastern Missouri will be the major topic. Plant diseases commonly encountered in the horticulture industry will also be discussed.

**HRT121 _____ (3-0) 3 cr hrs.
Introduction to Turfgrass Mgt (fall)**

A course in principles and practices of turfgrass propagation and management. Specialized practices relative to home lawn, golf courses, athletic fields, highway roadsides and seed and sod production will be presented. The biology and control of turfgrass pests will be discussed.

**HRT 131 _____ (3-0) 3 cr hrs.
Floral Design I (fall)**

A course which teaches students the principles and elements of design as they apply to flower arranging. Instructional methods includes lectures, design projects and extensive hands-on experience with fresh and silk floral materials.

**HRT 133 _____ (3-0) 3 cr hrs.
Plants for Interior Design (Web)**

A course pursuing the increasingly popular interior plantscaping where interior design skills are developed along with cultural management of tropical plants. The course stresses identification, scientific name, culture, and functional use of indoor tropical plants.

**HRT141 _____ (3-0) 3 cr hrs.
Introduction to Viticulture (fall)**

A course in the basic principles and practices of viticulture. Discussions will include the current status and the future of the grape industry in Missouri; vineyard site selection; cultivar selection; trellis systems; training and pruning of grape plants; irrigation; fertility management; disease management; and IPM.

**HRT143 _____ (3-Arr.) 3 cr hrs.
Wine Appreciation (fall)**

An introductory course taught to heighten the student's awareness of wines. Discussions will include the role of wine in history, religion, art, culture and society from pre-history to present day. Labs will include sensory evaluation of representative wines.

**HRT201 _____ (3-0) 3 cr hrs.
Floral Design II (spring)**

Prerequisite: HRT131

A continuation of Floral Design I. In Floral Design II, students move beyond the basics and study advanced topics such as funeral and wedding work. Topics of discussion will include business practices of a retail flower shop: advertising; shop layout; employment management; and a business plan.

**HRT209 _____ (3-0) 3 cr hrs.
Landscape Design I (fall)**

Prerequisite: HRT 109 and HRT111.

A detailed study of the functional uses of ornamental plants. Landscape design is explored with concern for design development, site analysis, plant graphics, lettering, and computer aided design. Principles of design are applied to residential and commercial design problems.

**HRT211 _____ (3-0) 3 cr hrs
Landscape Design II (spring)**

Prerequisite: HRT209

A continuation of Landscape Design I. In Landscape Design II students will work with base plans prepared in Landscape Design I and apply the principles and elements of design to create pleasing, functional designs.

**HRT217 _____ (3-0) 3 cr hrs
Horticulture Maintenance (spring)**

Prerequisites: HRT101, HRT103, HRT107, HRT115, and AGR143.

This course is designed to tie together the skills and knowledge acquired in other horticulture core classes. Discussions will include pest control, plant installation, plant pruning, and other plant maintenance practices.

**HRT221 _____ (3-0) 3 cr hrs
Greenhouse and Nursery Management (spring)**

Prerequisites include: HRT105, HRT109 and HRT111

A course with a greenhouse lab approach. Modern growing structures are studied. Topics studied include: nursery production, bedding plants, bulb crops, potted plants and commercial cut flowers. The business aspects of owning and/or managing a greenhouse, nursery or garden center will be discussed.

**HRT231 _____ (3-0) 3 cr hrs
Golf Course Management (spring)**

Prerequisite: HRT121

A course in which the basic turfgrass principles and practices will be used to explore turf management for golf courses. The material will be directed to every aspect of maintaining a professional turf program for the golf course. Discussions will include the subjects of fairways, tee and green management while also touching on equipment, irrigation, pest and disease.

**HRT233 _____ (3-0) 3 cr hrs.
Turfgrass Pathology (fall)**

Prerequisite: HRT121

A course in which the control of turfgrass diseases is discussed. The material will cover criteria necessary for disease development; cultural and chemical control practices; IPM; and systemic and contact fungicides.

**HRT235 _____ (3-0) 3 cr hrs.
Turfgrass Equipment (spring)**

Prerequisite: HRT231

A course in which equipment used in the turfgrass industry is discussed. Special emphasis will be given to the function and maintenance of each piece of equipment.

**HRT241 _____ (3-0) 3 cr hrs.
Fundamentals of Enology (spring)**

Prerequisite: HRT143 Wine Appreciation.

An introduction to the process and science of wine making, including history and geographical distribution of varieties and wine types; influence of climate and soil; wine fermentation, handling, and storage methods; wine disorders; winery sanitation; legal compliance.

**HRT243 _____ (3-0) 3 cr hrs
Vineyard Maintenance (spring)**

Prerequisite: HRT141.

A course taught in a vineyard offering students hands on experience in pruning, planting, and propagation of grapes as well as diagnosis and correction of vineyard problems. Classroom discussions will include marketing; labor management; financial projections and budgeting.

**HRT251 _____ (Arr.) 3 cr hrs
Horticulture Internship I**

Prerequisite: Sophomore standing. Open to Horticulture majors only.

A course designed to give the students actual experience in the day-to-day operation of a horticulture business.

**HRT253 _____ (Arr.) 3 cr hrs
Horticulture Internship II**

Prerequisite: HRT251.

A continuation of HRT251. Students may chose to work in a different business or in a different employment position at the same business as they worked in HRT251.

INTERDISCIPLINARY**IDS101 _____ 1 cr. hr.****Interdisciplinary Studies**

Prerequisite: Instructor permission.

Interdisciplinary Studies is a practical-experience course in which two or more departments combine forces and talents toward completion of an overall project. Credit is variable depending upon the amount of student participation.

IDS103 _____ 2 cr. hrs.**Interdisciplinary Studies**

Prerequisite: Instructor permission.

Interdisciplinary Studies is a practical-experience course in which two or more departments combine forces and talents toward completion of an overall project. Credit is variable depending upon the amount of student participation.

IDS105 _____ 3 cr. hrs.**Interdisciplinary Studies**

Prerequisite: Instructor permission.

Interdisciplinary Studies is a practical-experience course in which two or more departments combine forces and talents toward completion of an overall project. Credit is variable depending upon the amount of student participation.

MATHEMATICS

Enrollment in any mathematics course is contingent upon successful completion with a grade of "C" or better in all prerequisite courses. It is recommended that students who plan to study mathematics present themselves for the mathematics placement examination before the first semester of attendance.

MAT001 - MAT013 are offered as one-hour math refresher modules under the supervision of the Learning Center. These courses are offered as self-paced and/or independent study courses. These courses will not apply toward the Associate of Arts degree.

**MAT001 _____ (Arr.) 1 cr. hr.
General Math**

Designed for students with little or no background in mathematics.

**MAT002 _____ (Arr.) 1 cr. hr.
Arithmetic Skills I**

Prerequisite: ACT score of 0-12; Compass Pre-Algebra score of 1-18; or Compass Algebra score of 0-15.

First of three modules in Learning Center's Arithmetic Skills course covering basic arithmetic concepts. Whole numbers, prime factors, multiplication and division of fractions.

**MAT003 _____ (Arr.) 1 cr. hr.
Arithmetic Skills II**

Prerequisite: Grade of "C" or better in MAT002, Arithmetic Skills I

Second of three modules in Learning Center's Arithmetic Skills course covering basic arithmetic concepts. Addition and subtraction of fractions, decimals, ratio and proportion.

**MAT004 _____ (Arr.) 1 cr. hr.
Arithmetic Skills III**

Prerequisite: Grade of "C" or better in MAT002 and MAT003, Arithmetic Skills II.

Third of three modules in Learning Center's Arithmetic Skills course covering basic arithmetic concepts. Percent, simple interest, geometry, operations with signed numbers, and simple equations.

**MAT011 _____ (Arr.) 1 cr. hr.
Elementary Algebra I**

Prerequisite: ACT score 13-17; Compass Algebra score of 16-30; or "C" or better in MAT002, MAT003 and MAT004, Arithmetic Skills I, II and III.

First of three modules in Learning Center's Elementary Algebra course, it is designed to help student achieve proficiency in basic mathematics. This module covers operations with real numbers, properties of real numbers, solving linear equations and inequalities, and applied problems.

**MAT012 _____ (Arr.) 1 cr. hr.
Elementary Algebra II**

Prerequisite: Grade of "C" or better in MAT011, Elementary Algebra I.

Second of three modules in Learning Center's Elementary Algebra course. Module covers exponents, operations with polynomials, factoring, multiplication and division of rational expressions.

MAT013 _____ (Arr.) 1 cr. hr.
Elementary Algebra III

Prerequisite: Grade of "C" or better in MAT011 and MAT012, Elementary Algebra I and Elementary Algebra II.

Third of three modules in Learning Center's Elementary Algebra course. Module covers equations in two variables, finding roots, multiplication, division, addition, and subtraction of radicals, solving quadratic equations by square root property and quadratic formula.

MAT090 _____ (3-0) 3 cr. hrs.
Arithmetic

Prerequisite: ACT score of 0-12 or Compass Algebra score of 0-15.

The course includes adding, subtracting, multiplying, and dividing fractions and decimals; ratio and proportion; percent problems and converting between fractions, decimals, and percent; English and Metric systems of measurement; finding perimeter, area, or volume of simple geometric figures. An introduction to signed numbers and simple equations may be included. Does not meet math requirements for AGS or AA degree and does not apply as elective credit toward an AA degree.

MAT095 _____ (3-0) 3 cr. hrs.
Elementary Algebra

Prerequisite: A minimum ACT score of 13; Compass Algebra score of 16-30; a grade of "C" or better in MAT090 or Learning Center Modules MAT002, MAT003 and MAT004.

A course designed to introduce students to the concepts of algebra. The course covers the real number system; solving equations and inequalities; exponents and polynomials; factoring; multiplying and dividing rational expressions; graphing linear equations; and introduces roots and radicals. Does not meet math requirements for AGS or AA degree and does not apply as elective credit toward an AA degree.

MAT100 _____ (Arr.) 1 cr. hr.
Metric Measurements

A course designed especially to help students become acquainted with the metric system. This course may be taken by any student for elective credit. It is designed for students majoring in elementary education and other non-science fields. This course of study will include linear measurements, area and volumes, units of mass (weight), temperature, time and conversions from the English system to the metric system and vice-versa. Lab experiments will be used to help the student gain confidence in making estimates when appropriate. This course is offered as a self-paced and/or independent study module in the Learning Center.

MAT113 _____ (3-0) 3 cr. hrs.
Intermediate Algebra

Prerequisite: A minimum ACT score of 18; Compass College Algebra score of 26-51 or a grade of "C" or better in MAT 095.

The course is designed to prepare students for the rigors of College Algebra. Included is a review of basic algebra concepts along with a more in depth study of linear and quadratic equations, graphing linear equations, polynomials, radicals, and roots. New topics include the Quadratic Formula, rational expressions, systems of linear equations, and functions.

MAT121 _____ (3-0) 3 cr. hrs.
College Mathematics

Prerequisite: A minimum ACT score of 24; Compass College Algebra score of 52-58; Compass Trigonometry score of 44-49; or a grade of "C" or better in MAT113.

A course which covers the significant components of College Algebra as recom-

mended in the Coordinating Board of Higher Education's Articulation Guidelines for general education requirements. This course is not to replace College Algebra (a prerequisite for Calculus) but is an alternative to College Algebra to meet general education requirements for students who do not need a pre-Calculus course.

MAT123 _____ (3-0) 3 cr. hrs.
College Algebra

Prerequisite: A minimum ACT score of 24; Compass College Algebra score of 52-58; Compass Trigonometry score of 44-49; or a grade of "C" or better in MAT113.

This is a comprehensive and rigorous course covering the concepts and techniques of Algebra including the following topics: the properties of linear equations and linear functions; graphs of a variety of functions (quadratic, cubic, absolute value, etc.); the algebra of functions; exponential and logarithmic functions; and solving systems of equations. Topics will be treated in detail and in depth.

MAT133 _____ (3-0) 3 cr. hrs.
Trigonometry

Prerequisite: A minimum ACT score of 26. Compass College Algebra score of 59-62; Compass Trigonometry score of 50-53; or a grade of "C" or better in MAT123. (MAT123 and MAT133 may be taken concurrently)

A study of trigonometric functions, angle measure, trigonometric identities and conditional equations, solution of right and general triangles, graphic representation of the trigonometric functions, inverse trigonometric functions and equations, and applications with vectors.

MAT153 _____ (3-0) 3 cr. hrs.
Foundations of Mathematics

Prerequisite: A minimum ACT score of 18; Compass Algebra score of 31-66; Compass College Algebra score of 26-51; or a grade of "C" or better in MAT095.

This course is designed for early childhood and elementary education majors and satisfies the A. A. math requirement for students who have declared those majors. The course will acquaint students with a variety of math topics which are taught at the elementary school level.

MAT160 _____ (3-0) 3 cr. hrs.
Calculus for Business and the Social Sciences

Prerequisite: A minimum ACT score of 26; Compass Trigonometry score of 50-53; Compass College Algebra score of 59-62; or a grade of "C" or better in MAT123.

This course is intended for students majoring in business, social, or life sciences. Functions and their properties will be reviewed. The concept of limits will be introduced leading to differentiation and integration of elementary functions. Applications will be emphasized.

MAT165 _____ (5-0) 5 cr. hrs.
Analytic Geometry and Calculus I (fall)

Prerequisite: A minimum ACT score of 27; Compass College Algebra score of 63-100; Compass Trigonometry score of 54-100; or a grade of "C" or better in MAT133. (MAT133 and MAT165 may be taken concurrently)

A study of algebraic applications to geometry and the basic concepts of the calculus. The content includes studies of the straight line, conic sections, limits, continuity, derivatives and differentials with applications involving time related changes, maxima and minima of algebraic functions, curve sketching, transcendental functions, and definite and indefinite integration.

MAT215 _____ (5-0) 5 cr. hrs.
Analytical Geometry and Calculus II (spring)

Prerequisite: A grade of "C" or better in MAT165.

The content covered consists of applications and techniques of integration; infinite series; conic sections, parametrized curves, and polar coordinates; vectors and analytic geometry in space.

MAT225 _____ (5-0) 5 cr. hrs.
Analytic Geometry and Calculus III (fall)

Prerequisite: MAT215.

The content of this course is all multi-variant calculus. It consists of a study of vector-valued functions, motion in space, partial derivatives, multiple integrals, and integration in vector fields all in terms of multi-variant expressions.

MAT233 _____ (3-0) 3 cr. hrs.
Differential Equations (spring)

Prerequisite: MAT225.

The content of this course consists of a study of first-order differential equations, modeling with first-order differential equations, differential equations of higher order and the Laplace Transform.

MANUFACTURING**MFG100** _____ 3 cr. hrs.
Principles of Maintenance

This course provides a technical overview of topics necessary for the non-maintenance personnel to acquire. Areas covered include basic machine operations, mechanics, electrical, electronics, and HVAC. Preventive maintenance and predictive maintenance and parts systems will receive particular emphasis. Working effectively with maintenance and engineering and the role of the non-maintenance personnel in relation to maintenance and engineering departments are also explored.

MFG103 _____ 3 cr. hrs.
Introduction to Quality Theory

Quality assurance and processes of continuous improvement are explored in this course. Philosophy and historical concepts related to the development and evolution of quality are covered. Special emphasis will be placed on scientific and statistical procedures available to industry that aid in the development of quality products and processes.

MFG105 _____ 3 cr. hrs.
Supply Chain Management and Distribution

This course covers all aspects of converting raw materials to finished goods. The broad areas to be covered are purchasing, planning, and distribution. Improvement strategies for supply chain management are also introduced in this course.

MODERN FOREIGN LANGUAGE**MFL117** _____ (3-0) 3 cr. hrs.
Elementary French

Prerequisite: Must meet same requirements necessary to take ENG133 to enroll.

An introduction to the French language and culture designed to expose students to the four basic language skills - reading, writing, listening, and speaking. (Cultural diversity course.)

MFL127 _____ (3-0) 3 cr. hrs.
Intermediate French

Prerequisite: Elementary French or high school equivalent (1-2 years of recent study).

A continuation of Elementary French (MFL117). By the end of this second semester

all major language structures will have been introduced. (Cultural diversity course.)

MFL129 _____ (3-0) 3 cr. hrs.
Culture of French Speaking World

Aspects of French life and culture will be covered. These include art, history, geography, people, cuisine, language and leisure activities. No previous language study required. No textbook required. (Cultural diversity course.)

MFL137 _____ (3-0) 3 cr. hrs.
Elementary Spanish

Prerequisite: Must meet same requirements necessary to take ENG133 to enroll.

An introduction to the Spanish language and to the Hispanic culture. Students will practice all four language skills, with special emphasis on conversation. (Cultural diversity course.)

MFL147 _____ (3-0) 3 cr. hrs.
Intermediate Spanish

Prerequisite: Elementary Spanish or high school equivalent (1-2 years of recent study).

A continuation of Elementary Spanish (MFL137). By the end of this second semester all major language structures will have been introduced. (Cultural diversity course.)

MFL150 _____ (3-0) 3 cr. hrs.
Elementary German

Prerequisite: Must meet same requirements necessary to take ENG133 to enroll.

Acquisition of an appreciation of the German culture and an introduction to speaking, reading, writing, and understanding the language. Special emphasis will be on conversation. (Cultural diversity course.)

MFL151 _____ (3-0) 3 cr. hrs.
Intermediate German

Prerequisite: Elementary German or high school equivalent (1-2 years).

A continuation of Elementary German (MFL150). By the end of this course all major language structures will have been introduced. (Cultural diversity course.)

MFL156 _____ (3-1) 4 cr. hrs.
German Language & Culture I

This course provides students with the opportunity to learn the basic elements of the German language. Speaking skills are an integral part of classroom activities, Web activities and testing. The students will participate in three hours of ITV instruction and one hour of web-based learning activities each week.

MFL158 _____ 1 cr. hrs.
German Language & Culture I – Lab

The student will participate in one hour of web-based learning activities for an acquisition of an appreciation of the German culture and reinforcement of speaking, reading, writing and understanding German.

MFL170 _____ (3-0) 3 cr. hrs.
American Sign Language I

Prerequisites: DCS100 or consent of instructor. Must meet same requirements necessary to take ENG133 to enroll.

An in-depth study of American Sign Language (ASL). Linguistic cultural features are presented in context of learning experiences.

MFL213 _____ (3-0) 3 cr. hrs.
French Composition and Conversation

Prerequisites: Elementary and Intermediate French or the equivalent (4 years of high school study).

A review of the fundamentals of grammar and elaboration of the major language structures. Special emphasis on writing and conversation. (Cultural diversity course.)

MFL214 _____ (3-0) 3 cr. hrs.
French Reading

Prerequisites: Elementary and Intermediate French or the equivalent (four years of high school study)

A course designed to increase reading comprehension and vocabulary development. (Cultural diversity course.)

MFL223 _____ (3-0) 3 cr. hrs.
Spanish Composition and Conversation

Prerequisites: Elementary and Intermediate Spanish or the equivalent (four years of high school study). Must meet same requirements necessary to take ENG133 to enroll.

A review of the fundamentals of grammar and elaboration of the major language structures. Special emphasis on writing and conversation. (Cultural diversity course.)

MFL225 _____ (3-0) 3 cr. hrs.
Spanish Reading

Prerequisites: Elementary and Intermediate Spanish or the equivalent (four years of high school study).

A course designed to acquaint the students with a selection of major Hispanic authors and to develop their ability to read Hispanic literary texts. Additional emphasis on conversation through class discussions in Spanish. (Cultural diversity course.)

MFL233 _____ (3-0) 3 cr. hrs.
Elementary Italian

Prerequisite: Must meet the same requirements necessary to take ENG133 to enroll.

Survey of the Italian culture and language. Acquisition of the basic skills of speaking, understanding, reading, and writing Italian. (Cultural diversity course.)

MFL234 _____ (3-0) 3 cr. hrs.
Intermediate Italian

Prerequisite: Elementary Italian or the equivalent.

A continuation of Elementary Italian, further developing the four basic language skills. (Cultural diversity course.)

MFL235 _____ 3 cr. hrs.
Advanced German Grammar & Reading

Prerequisite: MFL151.

This course is designed to move students beyond the basic elements of the German language and explore advanced grammar concepts. The reading of short stories will be used to reinforce the grammar that is learned. (Cultural diversity course.)

MFL236 _____ (3-0) 3 cr. hrs.
Advanced Italian Grammar and Conversation

Prerequisite: MFL233 and MFL234

Students will study more advanced grammar with emphasis on its practical application in conversation. (Cultural diversity course.)

MFL238 _____ (Arr.) 1 cr. hr.
European/Latin American Culture

This class is taught in connection with student tours to Europe or Latin America. See the coordinator of the Modern Foreign Language Department for more information. (Cultural diversity course.)

MFL239 _____ (Arr.) 3 cr. hrs.
European/Latin American Culture

This class is taught in connection with student tours to Europe or Latin America. See the coordinator of the Modern Foreign Language Department for more information. (Cultural diversity course.)

MFL240 _____ (Arr.) 5 cr. hrs.
European/Latin American Culture

This course is offered in conjunction with student tours. It is designed to introduce the student to the social, political, and economic culture of Europe and/or Spanish speaking countries. See the coordinator of the Modern Foreign Language Department for more information. (Cultural diversity course.)

MFL246 _____ (3-1) 4 cr. hrs.
German Language & Culture II

This course provides students with the opportunity to continue beyond the basic elements of the German language. Speaking skills are an integral part of classroom activities, Web activities and testing. The students will participate in three hours of ITV instruction and one hour of web-based learning activities each week.

MANAGEMENT

Courses numbered MGT001 through MGT008 are offered as self-paced and/or independent study modules toward the Learning Center. They do not apply toward an AA degree.

MGT001 _____ (Arr.) 1 cr. hr.
Basic Consumer Law

Covers basic legal terms, legal proceedings, and essential legal topics of interest to the consumer.

MGT004 _____ (Arr.) 1 cr. hr.
Introduction to Business Math I

First of two introductory courses in mathematics for business.

MGT005 _____ (Arr.) 1 cr. hr.
Introduction to Business Math II

Second module in the business math area. Teaches computational skills for situations that are encountered in business.

MGT113 _____ (3-0) 3 cr. hrs.
Managerial Accounting

Prerequisite: BUS205 or the equivalent.

An introduction to managerial accounting. This course includes interpretations of data and the use of accounting in planning and controlling business activities.

MGT114 _____ (3-0) 3 cr. hrs.
Cost Accounting

Interpretations and managerial implications of material, labor, and overhead for job order, process and standard cost systems, cost-volume-profit relationships, direct production flows, joint and by-products, spoilage and scrap, responsibility accounting and reporting.

MGT119 _____ (3-0) 3 cr. hrs.
Financial Accounting

An introduction to accounting minimizing procedural detail and emphasizing financial reporting and management usage.

MGT130 _____ (3-0) 3 cr. hrs.
Organizational Analysis and Management

This is an introductory course studying and analyzing all aspects of organizations.

Administrative, governance and related strategies are discussed. Particular emphasis will be given to change management and creating a culture for improvement and innovation. Creating and managing effective teams is emphasized.

MGT131 _____ (3-0) 3 cr. hrs.
Project Management

Prerequisite: TEC156 Manufacturing Processes and Estimating.

All aspects of taking a project from conception to completion are explored. Special emphasis is placed on working

cross-functionally within the organization. An introduction to automated systems of project management is included, along with overview of microcomputer applications used in project management (i.e., word-processing, spreadsheets, and databases).

MGT132 _____ (3-0) 3 cr. hrs.
Entrepreneurship

This course will provide students with the fundamental knowledge needed for organizing, developing, and implementing a business concern within the private enterprise system. Entrepreneurship also serves to meet the interest and needs of students who are planning on starting or operating their own business. The course provides continued education that meets the needs for some licensure requirements.

MGT133 _____ (1-0) 1 cr. hr.
Basic Supervisory Skills

Course provides foundational training for first and second level leaders in the areas of communication, coaching, and leadership. Curriculum will be from Development Dimensions International Leadership and Workforce Development programs.

MGT156 _____ (3-0) 3 cr. hrs.
Statistics

An elementary course on uses of central tendency and measures of variation on data; introduction of probability; probability distributions; sampling distributions and analyzing simple experiments using hypothesis testing techniques.

MGT159 _____ (3-0) 3 cr. hrs.
Personal Finance

This course is designed to teach the students to manage personal income. Students will become familiar with the techniques necessary to make choices when considering major purchases, insurance, borrowing, and other personal finance issues.

MGT171 _____ (3-0) 3 cr. hrs.
Human Resource Management

The principles and procedures of managing personnel in modern business, industrial enterprises, and government organizations. Special emphasis will be placed on planning and recruitment, selection, interviewing, training, appraising performance, compensation issues, incentive rewards and benefits, safety and health, employee rights and discipline, labor relations and collective bargaining/contract administration.

MGT172 _____ (3-0) 3 cr. hrs.
Labor Relations

Contents, negotiation, and administration of collective labor agreements and settlement of disputes.

MGT173 _____ (3-0) 3 cr. hrs.
Safety Management

Discussion of safety organization, responsibilities of safety personnel, safety engineering, accident reporting, safety education, safety inspection enforcement principles and safety program evaluation.

MGT180 _____ (3-0) 3 cr. hrs.
Business Mathematics

The application of basic mathematics to business transactions. Problems in buying, selling, interest, installment payments, insurance, commissions, taxes, depreciation and payroll are emphasized.

MGT184 _____ (3-0) 3 cr. hrs.
Finance

Prerequisite: BUS205 or the equivalent.
The general study of methods of financing

business enterprises and their relationship to personal and company investment policies. Emphasis on financial statement and analysis, asset management, forecasting and budgeting.

MGT191 _____ (1-0) 1 cr. hr.
Occupational Education Special Study
Same as MGT193 except for variable credit.

MGT192 _____ (2-0) 2 cr. hrs.
Occupational Education Special Study
Same as MGT193 except for variable credit.

MGT193 _____ (3-0) 3 cr. hrs.
Occupational Education Special Study

Prerequisite: Consent of instructor.
Independent study of specialized area in occupational education. Topics and/or project to be approved by instructor prior to enrolling in the course.

MGT194 _____ (1-0) 1 cr. hr.
Management Seminar

This course introduces students to the social environment of business through exploration of professional strategies, image and dress, and current business and professional issues. Special emphasis will be given to developing critical thinking skills that can be implemented in all aspects of a personal and professional life. The course format consists of a series of mini-seminars related to the social environment of business.

MGT202 _____ (2-0) 2 cr. hrs.
Selling Bank Services

Course demonstrates how to pinpoint and practice human relations skills that encourage smooth, clear and personal communication between the banker and the customer. Focus is on the basic steps in selling proceeds to the product benefits that would appeal to a customer and concludes with how to spot clues that tell the banker what the customer needs.

MGT203 _____ (3-0) 3 cr. hrs.
Advertising and Sales Promotion

A study of the marketing activities that stimulate consumer and organizational purchasing. Students will develop and present effective advertising layouts and sales campaigns using various strategies and media.

MGT204 _____ (1-0) 1 cr. hr.
Customer Service Skills

Course emphasizes the development of better communications skills to benefit employees, customers and the bank. The student will learn effective ways of establishing contact, exploring customer needs, defining and resolving problems and closing the encounter.

MGT220 _____ (Arr.) 3 cr. hrs.
Business Internship

Prerequisite: Sophomore standing, consent of instructor
Supervised occupational experience in local business establishments.

MGT221 _____ (3-0) 3 cr. hrs.
Salesmanship

Prerequisite: BUS233 or consent of instructor.
Salesmanship is a course designed to explore the complete process of salesmanship. Areas of study will include buying behavior and demographic markets, the selling process, responsibilities (ethics, self-management and customer relations), types of selling and sales management. Sales strategies and tactics will be incorporated into the course and applied through simulations in various stages of the sales process.

MGT247 _____ (3-0) 3 cr. hrs.
Money and Banking

Prerequisite: Economics recommended.
Course presents basic economic principles as related to banking: the economy—how it works, the Federal Reserve System, the business of banking, monetary policy and its impact on financial markets and banks, alternative theories of money's role in the economy, fiscal policy, and trends in banking.

MGT252 _____ (3-0) 3 cr. hrs.
Consumer Lending

Prerequisite: MGT275 or consent of instructor.
A modular course which emphasizes the pragmatic "how to" details of consumer lending. Topics covered are: principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance, and rate structure and yields.

MGT255 _____ (3-0) 3 cr. hrs.
Bank Accounting

Prerequisite: BUS200 or Bank experience.
An attempt to provide the industry with an accounting course designed specifically to acquaint students with the peculiarities of bank accounting, to address more effectively the uniqueness of those peculiarities, and to foster continued student interest in potential career and development opportunities.

MGT261 _____ (3-0) 3 cr. hrs.
Marketing Research

Prerequisite: Sophomore standing and consent of instructor.
Students will gain practical business and management knowledge by conducting supervised research projects in approved local business firms. Topic selection will depend upon student's career interests and the cooperation of local managers and owners.

MGT265 _____ (3-0) 3 cr. hrs.
Small Business Management

This course will concentrate on aspects of starting a new business such as financing, marketing, organizing, and maintaining the business with accounting, marketing, insurance, and other considerations. Several actual case studies will be examined.

MGT266 _____ (3-0) 3 cr. hrs.
Supervision: Middle Management

A practical course in supervision giving the students an opportunity to upgrade skills in understanding people, planning, personnel supervision, giving and taking orders, problem solving and work organization.

MGT269 _____ (2-0) 2 cr. hrs.
Supervision: Middle Management

Same as MGT266 except for variable credit.

MGT272 _____ (3-0) 3 cr. hrs.
Law and Banking Applications

Prerequisite: MGT275 or consent of instructor.
This course is an introduction to laws pertaining to secured transactions, letters of credit and bank collection process.

MGT273 _____ (2-0) 2 cr. hrs.
Marketing for Bankers

Prerequisite: MGT275 or consent of instructor.
This course familiarizes students with the application of marketing philosophy and principles as they relate to the banking

industry. Provides the necessary background for understanding and practicing marketing.

MGT274 _____ (2-0) 2 cr. hrs.
Law and Banking Principles

An introductory college level course with emphasis on an overview of legal principles affecting and governing banking in the United States.

MGT275 _____ (2-0) 2 cr. hrs.
Principles of Banking

A comprehensive introduction of banking in today's economy. Specific topics include the language, documents of banking, check processing, teller functions, deposit functions, bookkeeping, and bank loans and investments. The course ends with a discussion of the bank's role in the community.

MGT276 _____ (3-0) 3 cr. hrs.
Analyzing Financial Statements

Prerequisite: BUS200.

This course will develop skills to conduct a comprehensive and effective financial analysis of a business borrower in order to assess repayment capacity.

MGT277 _____ (3-0) 3 cr. hrs.
Deposit Operations

Prerequisite: MGT275 or consent of instructor.

This course will provide an overview of the U.S. payments system, banking law and regulation, and current industry practices. It will examine bank deposit-taking activities, consider how banks manage funds and explore the interbank EFT systems.

MGT278 _____ (1-0) 1 cr. hr.
Teller Training: Basic

Course focuses on the concepts and practices of a teller line. Practical applications for prospective new and experienced bank tellers.

MGT279 _____ (1-0) 1 cr. hr.
Teller Training: Advanced

Prerequisite: MGT278.

Advanced teller training is designed to further expand the responsibility levels of tellers by enhancing skills needed to become senior tellers. Areas of training covered will include compliance with banking laws and regulations, how to deal with emergencies, robberies, and con artists, creating a teamwork environment, EEOC laws and duties and responsibilities of teller supervisors.

MGT290 _____ (3-0) 3 cr. hrs.
E-Commerce

Prerequisite: CIS105 or consent of instructor.

This course explores business on the Internet (electronic commerce). Students will learn how to use E-commerce effectively through a variety of Internet activities designed to allow the student to gather corporate information, make a purchase on-line, develop an effective company Web site, and find global trading partners through practical application.

MUSIC
MUS101 _____ 1 cr. hr.
Band

This class is a performing ensemble focusing on music from the concert band & wind band repertoire. A variety of musical styles will be rehearsed and performed each semester.

Open to all students and community people who play an instrument. Repeatable for three semesters.

MUS103 _____ 1 cr. hr.
Jazz Ensemble

This class is a performing ensemble focusing on music from the jazz ensemble repertoire. A variety of styles (swing, latin, ballad, rock, bossa nova, pop, funk, contemporary) will be rehearsed and performed each semester. Open to all students who play an instrument associated with big band jazz. Repeatable for three semesters.

MUS105 _____ 1 cr. hr.
Mineral Area College Singers

This class is a performing ensemble focusing on the large choral ensemble repertoire (Soprano/Alto/Tenor/Bass). Open to all students with the consent of the instructor. Repeatable for three semesters.

MUS115 _____ 1 cr. hr.
Steel Drum Ensemble

This class is a performing ensemble focusing on the ever-growing popularity of the steel drum band. Students will be instructed in the techniques of steel drum performance. Open to all students and people in the community. This group also utilizes students who play the keyboards, bass, guitar, drums and percussion. Repeatable for three semesters.

MUS113 _____ 3 cr. hrs.
Introduction to Music Theory (summer)

A presentation of the basic fundamentals of music theory including rhythm, meter, intervals, scale construction and triad construction. This course is recommended for music majors who have not had music theory in high school.

MUS131 _____ 3 cr. hrs.
Music Theory I (fall)

Corequisite: MUS137

A beginning study of music theory, including the study of intervals, triads, four-part diatonic harmony, connection of triads and their inversions.

MUS132 _____ 3 cr. hrs.
Music Theory II (spring)

Prerequisite: MUS131

Corequisite: MUS138

A continuation of MUS131 extending into the areas of seventh chords and non-harmonic tones.

MUS133 _____ 3 cr. hrs.
Music Theory III (fall)

Prerequisite: MUS132

Corequisite: MUS139

Extension of materials of MUS132 to include a more complex chordal vocabulary, secondary dominants, altered chords, continuation and expansion of the modulatory processes.

MUS134 _____ 3 cr. hrs.
Music Theory IV (spring)

Prerequisite: MUS133

Corequisite: MUS140

Extension of materials of MUS133 to include the Neapolitan Sixth Chord, Ninth, Eleventh, and Thirteenth Chords and the Augmented Sixth Chords. Also includes an introduction to the music vocabulary of the 20th Century.

MUS137 _____ 2 cr. hrs.
Sightsinging/Ear Training I (fall)

Corequisite: MUS131

A beginning study of aural, vocal, and cognitive skills in the singing of music at sight. Emphasis will be placed upon identification of intervals by their sound, the singing of written intervals and the singing of melodies by sight. The study of major and minor keys, rhythm, and simple and compound time will also be included.

MUS138 _____ 2 cr. hrs.
Sightsinging/Ear Training II (spring)

Prerequisite: MUS137

Corequisite: MUS132

A continuation of MUS137, extending studies into the areas of the Dominant 7th, chord implications outside of the I and V chords, and the tritone.

MUS139 _____ 2 cr. hrs.
Sightsinging/Ear Training III (fall)

Prerequisite: MUS138

Corequisite: MUS133

A continuation of MUS138, extending studies into the areas of chromaticism, syncopation, modulations and medieval modes.

MUS140 _____ 2 cr. hrs.
Sightsinging/Ear Training IV (spring)

Prerequisite: MUS139

Corequisite: MUS134

A continuation of MUS139, extending studies into the areas of changing meters, hemiola, remote modulation, and 20th century melodies.

MUS142 _____ 2 cr. hrs.
Class Piano I (fall)

Beginning instruction using an adult text. Scales chords, and harmonization of simple melodies.

MUS143 _____ 2 cr. hrs.
Class Piano II (spring)

Prerequisite: MUS142 or comparable ability

A continuation of MUS142.

MUS163 _____ 3 cr. hrs.
Appreciation of Music

A study of the development of music to provide a basis for the understanding and appreciation of music.

MUS165 _____ 3 cr. hrs.
Appreciation of Jazz

Students will study the main eras of jazz (Dixieland, Swing, Bebop, Cool Jazz, Fusion, Avantgarde) and the significant jazz artists from each period. They will be taught to recognize instruments by sound and sight, as well as to identify jazz forms through listening alone.

MUS168 _____ 3 cr. hrs.
History and Form of Rock Music

This course studies the history of Rock/Pop music from the beginning of the Blues up until present time. There will also be an emphasis on teaching the student to recognize common music forms through listening alone. (Cultural diversity course.)

MUS173 _____ 3 cr. hrs.
Introduction to Music

The study and practice of the basic rudiments of music. This course is specifically designed for the non-music major. An emphasis for acquiring these fundamentals are placed on the student's ability to learn basic piano skills.

MUS175 _____ 3 cr. hrs.
Beginning Guitar

An introductory course dealing with the fundamental playing techniques and basic music reading skills for the guitar. Course is designed to teach the student how to continue the learning process beyond the class. Open to all students and people of the community.

MUS180 _____ 1 cr. hr.
Studio Music

This class is a performing ensemble focusing on the creation and production of a large-scale musical-variety show. Open to

DESCRIPTION : MUS-NUR

all students who sing or play an instrument in any style of music, through the consent of the instructor. Repeatable for three semesters.

MUS184 _____ 3 cr. hrs.
Introduction to Audio Recording

This class introduces audio recording for the desktop musician using hardware and software systems. Emphasis is on stereo audio production including basic MIDI sequencing, tracking, mixing, data archiving and CD creation.

MUS227 _____ 1 cr. hr.
Applied Voice

This course is a one-on-one, private lesson with the instructor. The class is primarily for those students who are majoring in music (voice) or for those who have had previous comparable experience. Repeatable for three semesters.

MUS229 _____ 1 cr. hr.
Applied Piano

This course is offered to music majors whose principle instrument is the piano. The main purpose of this course is to teach and sharpen those skills required of the piano major and to prepare the student for transfer to a four-year institution. Areas of study will include scales, arpeggios, technique, sight-reading and standard piano repertoire. Open to all piano majors with consent of the instructor. Repeatable for three semesters.

MUS249 _____ 1 cr. hr.
Applied Guitar

This course is a one-on-one, private lesson with the instructor. The class is primarily for those students who are majoring in music (guitar) or for those who have had previous, comparable experience. Repeatable for three semesters.

MUS250 _____ 2 cr. hrs.
Instrumental Techniques I

Course designed for all wind-playing instrumentalists and percussionists who wish to improve their technical and performance skills on their chosen instrument.

MUS252 _____ 2 cr. hrs.
Instrumental Techniques II

Prerequisite: MUS250 or comparable ability
 A continuation of MUS250.

MUS254 _____ 2 cr. hrs.
Instrumental Techniques III

Prerequisite: MUS252 or comparable ability
 A continuation of MUS252

MUS256 _____ 2 cr. hrs.
Instrumental Techniques IV

Prerequisite: MUS254 or comparable ability
 A continuation of MUS254

MUS266 _____ 1 cr. hr.
Jazz Combo

A performing ensemble focusing on the small group sound of jazz. A major emphasis is placed on the student learning and applying the creative process of improvisation. Open to all vocalists or instrumentalists through the consent of the director. Repeatable for three semesters.

PRACTICAL NURSING

NUR127 _____ (2-0) 2 cr. hrs.
Body Function

Prerequisite: Grade of "C" or above in sequential PN Program curriculum courses, inclusive of 5 cr. hr. Anatomy.

This course was designed to provide the student with fundamental knowledge of the functions of the major body systems. The course relates how organized anatomical

structures of a particular size, shape, form, or placement are intended to serve unique or specialized functions.

With repeated emphasis of this principle, students are encouraged to integrate otherwise isolated factual information into a cohesive and understandable whole. This course covers the essentials, places emphasis on concepts, and correlates body structure (anatomy) with function (physiology). Homeostasis is integrated by demonstrating how "normal" interactions of structures and their functions are achieved and maintained by dynamic counterbalancing forces.

NUR128 _____ (3-0) 3 cr. hrs.
Therapeutic Nutrition

Prerequisite: Acceptance into the current program of Practical Nursing at Mineral Area College.

Designed to provide the student knowledge of the essential nutrients by definition, function, and food source; to relate how the body uses foods consumed for energy, growth, or maintenance; describe how health care providers can teach/assist clients to manipulate use of essential nutrients when pathology causes, or is caused by, nutritional impairment.

Additional emphasis is placed on the need for health care providers to recognize changing nutritional needs of the various age-related populations throughout the lifespan and the need to educate clients about proper food preparation, storage, and safety.

Each student is required to apply theoretical knowledge gained through a dietary analysis assignment. This assignment includes comparing appropriate food selections to a 24 hour diet recall, calculating recommended daily allowance needs, and developing menus based on personal dietary needs to maintain optimal health, or based on therapeutic diet requirements as indicated in the presence of pathology.

NUR129 _____ (Arr.) 6 cr. hrs.
Fundamentals of Nursing

Prerequisite: Acceptance into the current Program in Practical Nursing at Mineral Area College.

This course was designed to provide basic knowledge and nursing skills upon which all future care is based. Communication in a nurse-client relationship, maintenance of a safe environment, body mechanics, assessment skills, utilization of observational and manipulative skills and equipment to perform physical examinations, documentation (including spelling, punctuation, and common medical abbreviations), legal and ethical implications, cultural considerations, formulation of a plan of care utilizing the nursing process, the infectious process cycle, preventing spread of communicable disease, sterile technique, personal hygiene, urine and bowel elimination, care of the inactive client, wound assessment and care, care of the surgical client, airway management, pain management, and care of the terminally ill are emphasized.

NUR131 _____ (1-0) 1 cr. hr.
Personal and Vocational Concepts

Prerequisite: Acceptance into the current Program in Practical Nursing at Mineral Area College.

Designed to assist the student in relating the history of nursing to the concept of Practical Nursing vocational training, discussing health care systems, legal concerns, and ethical issues in the nursing profession while recognizing the impact of cultural diversity. Nursing theories in relation to the nursing process and nursing practice are explored. Emphasis is also placed on importance of memberships and participation in profes-

sional organizations and continued education, construction of a resume, job application, letter of resignation, and job interview skills.

NUR132 _____ (Arr.) 2 cr. hrs.
Geriatric Nursing

Prerequisite: Successful completion of all Program in Practical Nursing first trimester courses and Grade of "C" or above in sequential PN Program curriculum courses.

Designed to provide students with fundamental knowledge of functional changes in body systems commonly associated with aging, pathology, and/or inactivity. Human sexuality, living and care facilities, financial considerations, cultural implications, and pharmacotherapy are included to provide a holistic view of geriatric nursing care.

Through theory and clinical experience, the students have the opportunity to assess and interact with an assigned client to reinforce physical assessment, documentation, and therapeutic communication skills. The geriatric clinical component includes a practice review of physical examination techniques on a co-student with the aid of body systems assessment handout and audio-tape, data gathering from client chart and interview for documentation of past and current health history, including medications and a process recording, and the opportunity to perform and document a body systems assessment and ADL assessment utilizing assigned volunteer client.

NUR135 _____ (Arr.) 4 cr. hrs.
Maternity Nursing

Prerequisite: Successful completion of all Program in Practical Nursing first trimester courses and Grade of C or above in sequential PN Program curriculum courses.

Through theory and clinical experience, this course is designed to provide information on the physiologic and psychologic changes and adaptation of the mother and family to pregnancy. Emphasis is also placed on high risk categories, complications during labor and delivery, medical treatments, nursing interventions including client education, emotional and physical support, the normal newborn, and deviations from normal.

NUR137 _____ (2-0) 2 cr. hrs.
Basic Pharmacology

Prerequisite: Acceptance into the current Program in Practical Nursing at Mineral Area College.

This course is designed to provide the student knowledge of basic principles of pharmacology, the various medication administration routes, dosage calculations, application of the nursing process to medication administration, and utilization of information sources. Dosage calculation and lab practicum exams are included and are required to be successfully completed to progress in the program.

NUR138 _____ (Arr.) 12 cr. hrs.
Medical-Surgical Nursing

Prerequisite: Successful completion of all Program in Practical Nursing first & second trimester courses and Grade of C or above in sequential PN Program curriculum courses.

This course is designed to prepare students to respond to a wide array of demands and changes with the current shifting of nursing care from acute care hospital to community-based settings and the home.

A continuing emphasis is placed on ethnic and cultural diversity, critical thinking through the nursing process, and client/family teaching about detection, prevention, and management of complications for clients being discharged within very few days of newly diagnosed major illnesses and surgeries. Concepts and challenges in client management, including

concepts and general principles in perioperative, intraoperative, and postoperative client management, are stressed.

Assessment, general management, and therapeutic interventions of specific pathophysiologic dysfunctions of major body systems as well as acute problems of infectious diseases are covered, and include exploration of legal and ethical decision-making issues to continue the emphasis of nurses as client advocates.

NUR141 _____ (1-0) 1 cr. hr.

Applied Pharmacology

Prerequisite: Successful completion of all courses in the first & second trimester and Grade of C or above in sequential PN Program curriculum courses.

This course is intended to complete the pharmaceutical education started in first trimester Basic Pharmacology for beginning nurse generalists. Discussion includes the various drug classifications, profiles of drugs within each classification, their pharmacokinetics, physiological conditions for which they may be prescribed, their mechanisms of action, therapeutic effects, adverse/side effects, dosages, contraindications, toxicity/management of overdose, interactions, and the nursing process, including client teaching, for planning care for clients receiving agents within these classifications.

These chapters are taught in tandem with the various medical-surgical topics included in Medical-Surgical nursing to enhance correlation of drug therapy with conditions of body systems. A clinical rotation for medication administration is included. As outlined in Basic Pharmacology: dosage calculations, preparation for drug administration, legal, ethical and cultural considerations, routes of medication administration, manipulative techniques for administering drugs, monitoring for therapeutic and side/adverse effects, and documentation are continued as points emphasized for successful completion of the clinical portion of this course.

NUR142 _____ (Arr.) 3 cr. hrs.

Pediatric Nursing

Prerequisite: Successful completion of all Program in Practical Nursing first trimester courses, Maternity Nursing, and Grade of C or above in sequential PN Program curriculum courses.

Designed to provide both classroom instruction and clinical experience to assist the student in identifying common disorders in children from infancy through adolescence and provide nursing care for hospitalized pediatric clients. Pathophysiology, pharmacotherapy, other medical treatment, psychosocial and cultural implications, and nursing care and teaching of the client and family are emphasized. Nursing measures to alleviate non-adaptive responses utilizing the nursing process, application of communication skills in the pediatric setting, and discussion of the special needs of hospitalized children and medication administration are included to provide a holistic approach to effective pediatric nursing care.

NUR143 _____ (Arr.) 4 cr. hrs.

Mental Health Nursing

Prerequisite: Successful completion of all Program in Practical Nursing first trimester courses and Grade C or above in sequential PN Program curriculum courses.

A course designed to introduce the student to history and trends in psychiatric nursing, major psychiatric theoretical models, the five axes of the psychiatric classification system, the major psychiatric illnesses inclusive of definitions, clinical manifestations, psycho-

pharmacology, medical treatments, nursing interventions and milieu management.

This course is intended to provide fundamental knowledge of mental health concepts and interactional techniques for the beginning nurse. The roles that emotions and stress play in the behavior of the client and client's family are emphasized to provide the student with a better understanding of behavior and provides a useful framework for planning and providing nursing care in any health care setting. Community-based mental health clinical experience is included.

OFFICE SYSTEMS TECHNOLOGY

OST100 _____ (3-0) 3 cr. hrs.

Keyboarding I

The development of sound techniques in touch keyboarding, with an introduction to manuscripts, business letters, and tabulation. For beginners.

OST102 _____ (3-0) 3 cr. hrs.

Keyboarding II

Prerequisite: OST100 or equivalent.
Instruction and practice directed toward improvements of speed and accuracy, with problems covering business letters, tabulated and technical reports, and various business forms.

OST108 _____ (1-0) 1 cr. hr.

10-Key Numeric Skills

Fundamentals of operating the ten-key number pad on a calculator using touch techniques, with emphasis on speed and accuracy development.

OST110 _____ (2-0) 2 cr. hrs.

Filing Systems and Records Management

Prerequisite: OST100 or the equivalent.
A comprehensive study of basic filing rules, procedures, equipment, and management of records. Manual filing procedures and rules as well as computer applications will be studied.

OST120 _____ (3-0) 3 cr. hrs.

Beginning Notehand

Prerequisite: OST100 or the equivalent.
This course teaches an alphabetic system of writing which enables the student to increase their writing speed for effective note-taking and transcription. Includes dictation at moderate rates and a short unit on note-taking techniques.

OST130 _____ (3-0) 3 cr. hrs.

Office Procedures I

Prerequisite: OST100 or the equivalent.
A course designed to prepare the student to carry out the normal duties in a business office involving keyboarding, duplicating, using the telephone, processing mail, letter composition, and the administrative assistant as office hostess.

OST132 _____ (3-0) 3 cr. hrs.

Office Procedures II

Prerequisite: OST100 or the equivalent.
A course designed to prepare the student for office tasks including collecting and presenting data, researching and writing reports, handling travel arrangements and meetings, completing financial and legal documents, and maintaining investment and insurance records.

OST140 _____ (3-0) 3 cr. hrs.

Business Communications I

Prerequisite: OST100 or the equivalent.
This course is designed to improve communication skills. Verbal, nonverbal and written communications are studied.

OST150 _____ (3-0) 3 cr. hrs.

Applied Accounting I

This is a non-transfer course designed to meet the needs of those students who will be pursuing the first course in accounting. They may acquire skills necessary for initial employment as a bookkeeper in a small business, or for the purpose of keeping personal records.

OST152 _____ (3-0) 3 cr. hrs.

Applied Accounting II

Prerequisite: OST150.
A continuation of OST150.

OST160 _____ (4-0) 4 cr. hrs.

Medical Coding I

An introduction to Medical Coding: a basic introduction to coding format and conventions. Students will become familiar with the Evaluation and Management Documentation Guidelines. Students become proficient in the basics of medical coding using the ICD-9, CPT, and HCPC codes. Case studies illustrate how to apply coding guidelines and identify the documentation necessary for code assignment.

OST162 _____ (1-0) 1 cr. hr.

Medical Office Procedures

This course allows the student to experience intensive learning and review of medical office policy and procedures including HIPPA and OsHia materials for the medical office.

OST164 _____ (2-0) 2 cr. hrs.

Medical Software and Electronic Billing

This course allows the student to understand the software process and how the data entered is processed. In this hands-on course, the student will work with the software and produce approximately 400 claims electronically.

OST200 _____ (3-0) 3 cr. hrs.

Transcription Skills

Prerequisite: OST102 or consent of instructor.

This course will help develop transcription skills needed to produce correspondence that meets office standards. Language skills will be strengthened while the technical skill of transcribing is improved. Listening and decision making receive attention, also. Students become familiar with various types of documents from various fields of employment.

OST208 _____ (3-0) 3 cr. hrs.

Business Applications

Prerequisite: CIS 175 or the equivalent.
This course is to acquaint secretarial students with situations and forms they can expect to encounter in the employer's office. A generic administrative assistant simulation (practice set) is used.

OST220 _____ (3-0) 3 cr. hrs.

Introduction to Business

A general survey course designed to give the student a general knowledge of the characteristics, functions and problems of the modern business world.

OST230 _____ (3-0) 3 cr. hrs.

Business Communication II

This course is designed to supplement and reinforce communication skills necessary for entry-level employees. Major topics covered include: making presentations, listening and telephone techniques, written communication, verbal and nonverbal communications, decision-making and problem-solving, business etiquette/ethics, cultural diversity, customer service and changing generations.

OST240 _____ (Arr.) 3 cr. hrs.**Business Internship I (Secretarial)**

Prerequisite: Sophomore standing and consent of instructor.

Supervised occupational experience in local business establishments.

OST242 _____ (Arr.) 3 cr. hrs.**Business Internship II (Secretarial)**

Prerequisite: Sophomore standing and consent of instructor.

A continuation of OST220.

OST260 _____ (4-0) 4 cr. hrs.**Medical Coding II**

Prerequisite: OST160

An in-depth study of specific areas of medical coding usage and reimbursement in the medical fields of surgery, radiology, pathology, anesthesia, physician and hospital coding and reimbursement.

PARAMEDIC TECHNOLOGY**PAR200 _____ (8-0) 8 cr. hrs.****Principles of Paramedic Technology I**

Prerequisite: Must hold current EMT license and be accepted in the Paramedic Program.

This course is an overview of Paramedic practice integrating the theory behind the use of advanced diagnostic and treatment procedures into the management of organic, life-threatening emergencies.

PAR202 _____ (8-0) 8 cr. hrs.**Principles of Paramedic Technology II**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all first semester paramedic courses.

This course serves as an overview of paramedic practice and integrates the theory behind the use of advanced diagnostic and treatment procedures in the management of life-threatening emergencies. Topics include cardiovascular, cerebrovascular and other medical emergencies and their relationship to their respective disease processes.

PAR204 _____ (3-0) 3 cr. hrs.**Principles of Paramedic Technology III**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all first semester paramedic courses.

This course integrates the theory behind the use of advanced diagnostic treatment procedures into the practice of the paramedic. Areas of emphasis include infectious disease, OB/GYN, behavior, abuse, geriatrics, hematology and patients with special consideration.

PAR206 _____ (4-0) 4 cr. hrs.**Principles of Paramedic Technology IV**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all second semester paramedic courses.

This course integrates the theory behind the use of advanced diagnostic treatment, assessment based management, counseling, rescue, and communication procedures into the practice of the paramedic. Pediatrics, management of the chronically ill, extrication, rescue, and communication techniques will be emphasized in this course.

PAR208 _____ (3-0) 3 cr. hrs.**Pharmacology for Paramedics**

Prerequisite: Must hold current EMT license and be accepted in the Paramedic Program.

This course discusses drug theory and usage by paramedical personnel. Areas of emphasis are general principles of drug action, the mathematics of dosage calculation, the therapeutic effects, indications, contraindications, dosages, administration routes

and possible side effects of emergency drugs. Discussions include important prescription medications and their relationship to emergency treatment.

PAR210 _____ (4-0) 4 cr. hrs.**Paramedic Anatomy & Physiology**

Prerequisite: Must hold current EMT license and be accepted in the Paramedic Program or consent of Program Coordinator.

This course is designed specifically for the Paramedic student to provide a basic understanding of the structure and function of the human body. The course includes an overview of each body system.

PAR214 _____ (0-1) 1 cr. hr.**Paramedic Laboratory I**

Prerequisite: Must hold current EMT license and be accepted in the Paramedic Program.

This course covers the practical skills relating to Principles of Paramedic Technology I, including patient assessment and history taking techniques, parenteral infusion techniques, antishock trousers, oxygen administration, airway adjuncts to include endotracheal intubation and cricothyroidotomy techniques.

PAR216 _____ (0-1) 1 cr. hr.**Paramedic Laboratory II**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all first semester paramedic courses.

This course covers the practical skills relating to Principles of Paramedic Technology II and Principles of Paramedic Technology III, including patient assessment and history taking techniques with emphasis on ECG interpretation as well as special OB/GYN techniques. At the completion of the semester, all skills covered previously will be reviewed.

PAR220 _____ (Arr.) 1 cr. hr.**Paramedic Clinical I**

Prerequisite: Must hold current EMT license and be accepted in the Paramedic Program.

This course allows students to provide advanced therapy to hospitalized patients under the supervision of licensed personnel.

PAR222 _____ (Arr.) 2 cr. hrs.**Paramedic Clinical II**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all first semester paramedic courses.

This course allows students to provide advanced therapy to hospitalized patients under the supervision of licensed personnel.

PAR224 _____ (Arr.) 1 cr. hr.**Paramedic Clinical III**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all second semester paramedic courses.

This course provides advanced therapy to hospitalized patients under the supervision of licensed personnel.

PAR230 _____ (Arr.) 1 cr. hr.**Paramedic Internship I**

Prerequisite: Must hold current EMT license and be accepted in the Paramedic program.

This course is designed specifically for those students who are currently enrolled in Paramedic Technology. Arrangements are made for the student to work with a pre-hospital, advanced life support system under the supervision of licensed personnel. Students will observe and practice the application of paramedic skills (5 additional hours per week).

PAR232 _____ (Arr.) 1 cr. hr.**Paramedic Internship II**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all first semester paramedic courses.

This course is designed specifically for the student who is currently enrolled in Principles of Paramedic Technology II and Principles of Paramedic Technology III. Arrangements are made for the student to work with a pre-hospital, advanced life support system under the supervision of licensed personnel. Students will observe and practice the application of paramedic skills.

PAR 234 _____ (Arr.) 4 cr. hrs.**Paramedic Internship III**

Prerequisite: Must hold current EMT license, be accepted in the Paramedic Program, and successfully complete all second semester paramedic courses.

This course is designed specifically for the student who is currently enrolled in Paramedic Technology IV. Arrangements are made for the student to work with a pre-hospital advanced life support system under the supervision of licensed personnel. The student will observe and practice the application of paramedic skills.

PERSONAL AWARENESS**PAW106 _____ (1-0) 1 cr. hr.****Preparation for Employment**

A course designed to teach students skills essential to the development of a sound job seeking strategy. The class requires the students to prepare a resume, cover letter, follow-up letter, and application blank, as well as practice interviewing techniques and learn tips to improve their chances of being successfully employed.

PAW108 _____ (2-0) 2 cr. hrs.**Career Search**

The essentials of the career search process are explored: needs, wants, values, roles, personality types, job satisfiers, job market, work styles and decision making. The class looks at internal motivators as well as external factors that influence job satisfaction. The class is intended for anyone desiring a life or career change.

PAW190 _____ (1-0) 1 cr. hr.**Stress Management**

This course will help the individual learn the causes, danger signals and effects of stress. The individual will be able to identify positive and negative areas of stress in his/her life and then use specific techniques of stress management to reinforce, control and cope with stress.

PAW194 _____ (2-0) 2 cr. hrs.**Stress Management II**

A further study of optimal health as it relates to stress management.

PAW196 _____ (1-0) 1 cr. hr.**Career Planning**

This course is designed to assist individuals in choosing a career through interest, abilities, and values testing. These test results provide the framework for career exploration through a variety of sources, including computerized career information systems, books, and job shadows. Students work one-on-one with career counselors to obtain career information on job duties, outlook, education, and pay.

PHYSICAL EDUCATION**PED102** _____ (2-0) 2 cr. hrs.
Introduction to Recreational and Outdoor Education

A course for those considering a career in recreational and outdoor education. This course will help develop an understanding of and appreciation for the sociological, economic, and personal factors involved in leisure services.

PED105 _____ (2-0) 2 cr. hrs.
Officiating of Sports Activities (fall)

A study of the mechanical and technical knowledge of rules, techniques, methods, and relation of the official to the sports of basketball, baseball, or volleyball.

PED107 _____ (2-0) 2 cr. hrs.
Fundamentals of Basketball (fall)

History of basic fundamentals, rules, and methods of developing material for this sport. This course is designed for students majoring or minoring in physical education.

PED109 _____ (2-0) 2 cr. hrs.
Fundamentals of Baseball (spring)

History of basic fundamentals, rules, and methods of developing material for this sport. This course is designed for students majoring or minoring in physical education.

Activity classes are not offered during a specific semester, but rather based on student needs and interests. If you have need for a specific class, please notify the Physical Education Coordinator.

PED200 _____ (Arr.) 1 cr. hr.
Basic Physical Fitness

This class is designed to meet the needs of the student for recreational activity and body conditioning.

PED208 _____ 1 cr. hr.
Beginning Golf

Instruction in the choice and use of clubs, form to be used and etiquette, rules and courtesies on the course.

PED209 _____ 1 cr. hr.
Intermediate Golf

Prerequisite: PED208 or consent of instructor.

Designed to help the golfer improve enjoyment of the game by improving golf swing, analyzing and correcting errors.

PED250 _____ (0-2) 1 cr. hr.
Aerobic Fitness

An exercise-type class designed to promote improved health and fitness for the individual who participates regularly in the program.

The primary goal of the class is cardiovascular/respiratory fitness. Secondary benefits include better skeletal muscle tone, coordination development, a trimmer body, and development of a positive mental attitude of good feeling. Aerobic Fitness is designed for the NON-dancer.

PED251 _____ (0-2) 1 cr. hr.
Intermediate Aerobic Fitness

An exercise-type class designed to promote improved health and fitness for the individual who participates regularly in the program.

This class is designed for individuals who are not in a regular exercise program. It takes an in-depth look at the overall concept of aerobic fitness. PED250 is not a prerequisite, but this class offers a more rigorous workout than PED250.

PED252 _____ (0-2) 1 cr. hr.
Modern Dance I

This class is restricted to students who are on the cheerleading squad. Tryouts for these two squads are held each year.

Cheerleaders are required to attend daily practices and perform at most men's home basketball games. The cheerleading squad will also perform at several men's and women's basketball games on the road.

One unit of physical education credit is granted if the student completes one full year (two semesters) on the squad.

PED253 _____ (0-2) 1 cr. hr.
Modern Dance II

Prerequisite: PED252.

One unit of physical education credit is granted if the student completes a second full year on either the cheerleading squad.

PED256 _____ (Arr.) 1 cr. hr.
Varsity Sports (Basketball)

Restricted to students who participate in sports at the intercollegiate level for a full semester. Sports included in this category are Basketball, Baseball, and Volleyball.

PED257 _____ (Arr.) 1 cr. hr.
Varsity Sports (Volleyball)**PED258** _____ (Arr.) 1 cr. hr.
Varsity Sports (Baseball)**PED270** _____ (Arr.) 1 cr. hr.
Wellness Center I

Instruction in the development of techniques in activities designed to increase body strength, flexibility and endurance.

PED271 _____ (Arr.) 1 cr. hr.
Wellness Center II

Prerequisite: PED270.

This course goes beyond PED270 in that it also covers cardiovascular condition and weight control.

PED272 _____ (Arr.) 1 cr. hr.
Total Fitness

Prerequisite: PED271.

This course is designed to involve all components of fitness and wellness utilizing aerobic type equipment and principles.

PED273 _____ (Arr.) 1 cr. hr.
Cycling Ergometry for Fitness

A complete controlled aerobic training program for any age, sex, or fitness level. Course is designed to improve lung capacity, stimulate metabolism, affect body composition through the loss of fat, and reduce stress. This supervised program involves the development of individualized workload programs. Course is conducted in the Wellness Center, and utilizes ergometry equipment, especially stationary bicycles.

PED274 _____ (0-2) 1 cr. hr.
Foundations of Fitness I

This course consists of the study and participation in programs recommended for development of adult physical fitness. Emphasis is on determining level of fitness, importance of fitness in total well being, nutrition and diet selection, monitoring effect of fitness activities and selection of fitness/wellness programs.

PED275 _____ (0-2) 1 cr. hr.
Foundations of Fitness II

A continuation of PED274 with emphasis on fitness program selection and monitoring effects of fitness activities on the body through lifestyle utilization. The values of health-

related physical fitness; ramifications of a negative health life presented for individuals living in an automated, sedentary society, encouraging students to make intelligent decisions concerning a positive health life-style to enhance wellness now and in the future.

PHILOSOPHY**PHI140** _____ (3-0) 3 cr. hrs.
Introduction to Philosophy

This course introduces students to some of the great philosophers. Their thoughts on the meaning of life, limits of knowledge and basis for individual liberty are explored.

PHI141 _____ (3-0) 3 cr. hrs.
Comparative Religion

A survey of the major world religions, including Hinduism, Buddhism, Judaism, Christianity and Islam. (Cultural diversity course.)

PHI142 _____ (3-0) 3 cr. hrs.
Introduction to Ethics

An historical introduction to ethical theory with emphasis on comparison of contemporary American ethics with classical and modern moral principles.

PHYSICAL SCIENCE**PHS001** _____ (Arr.) 1 cr. hr.
Preparation for Chemistry I

A correlated individualized instruction program in introductory chemistry offered through the Learning Center. This course is designed for students with little background in chemistry and mathematics, and is recommended as preparation for PHS125. Does not apply toward an AA degree.

PHS002 _____ (Arr.) 1 cr. hr.
Preparation for Chemistry II

Prerequisite: PHS001.

The second course offered through the Learning Center designed for students with little background in chemistry and mathematics, and is recommended as preparation for PHS125. Does not apply toward an AA degree.

PHS003 _____ (Arr.) 1 cr. hr.
Introduction to General Science II

Emphasis is placed on the physical sciences. Self-paced instruction is offered in the Learning Center. Does not apply toward the AA degree.

PHS113 _____ (4-2) 5 cr. hrs.
Physical Science

Prerequisite: Grade of "C" or higher in MAT095 or higher level math course, or have a Compass or ACT math score to place into MAT113.

An introduction to the study of physical science for non-science majors. Especially recommended for elementary education majors. The first half of the course emphasizes the major ideas of physics while the second half emphasizes topics in chemistry.

PHS120 _____ (3-0) 3 cr. hrs.
Introductory Astronomy

An introduction to astronomical objects, structures, and processes designed for non-science majors. Topics include the history and cultural impact of astronomy, planetary and stellar evolution, galaxies, black holes and other exotic objects, the birth and large-scale structure of the cosmos, and life in the universe.

PHS123 _____ (3-4) 5 cr. hrs.
Oceanography

This is a course covering all areas of oceanographic study. The primary emphasis

DESCRIPTION: PHS-PSY

is physical oceanography, i.e. waves, tides, currents, shoreline ocean basins, ocean sediments and properties of salt water. A portion of the course covers marine ecology and marine life.

PHS125 _____ (3-4) 5 cr. hrs.
Introductory Chemistry

Prerequisite: Grade of "C" or higher in MAT095 or higher level math course, or have a Compass or equivalent or ACT math score that would place the student into MAT113.

A presentation of the fundamentals of chemistry for the non-science major who needs a course in physical science or who wishes to broaden his general scientific knowledge.

PHS135 _____ (4-3) 5 cr. hrs.
General Chemistry I (fall)

Prerequisites: One unit of high school chemistry AND Compass or ACT math score that would place the student into MAT123 or a higher math. High school physics is recommended as is being enrolled in MAT123 or a higher math.

A presentation of the fundamentals of chemistry for the science or engineering major. The laboratory emphasizes quantitative measurements and procedures.

PHS138 _____ (1-3) 2 cr. hrs.
Qualitative Analysis (spring)

Prerequisite: A grade of "C" or better in PHS135 or equivalent.

The study of the general theories for the qualitative separation and identification of metals. Students perform investigations in the laboratory which are pertinent to and coordinated with the lecture topics. The student may enroll separately from PHS139.

PHS139 _____ (3-3) 4 cr. hrs.
General Chemistry II (spring)

Prerequisite: A grade of "C" or better in PHS135 or equivalent.

A continuation of PHS135 covering more advanced subject matter with the emphasis placed on equilibrium.

PHS142 _____ (3-2) 4 cr. hrs.
College Physics I (fall)

Prerequisite: College Algebra with a grade of "C" or better.

An introduction to the nature of physical thinking and selected topics in mechanics, statics, dynamics, heat and thermodynamics, oscillatory motion and sound. Three lectures and one two-hour lab per week.

PHS144 _____ (3-2) 4 cr. hrs.
College Physics II (spring)

Prerequisite: PHS142 with a grade of "C" or better.

A continuation of PHS142, with emphasis on electricity, magnetism, optics and modern physics.

PHS223 _____ (4-2) 4 cr. hrs.
General Physics I (spring)

Prerequisite: Should be preceded or accompanied by MAT215.

An introductory course designed to meet the needs of physical science or engineering majors. Newtonian mechanics, heat and thermodynamics, and introductory mechanical wave motion are included. Three (3) lecture hours, one (1) problem session, and one (1) laboratory per week.

PHS224 _____ (4-2) 4 cr. hrs.
General Physics II (fall)

Prerequisite: PHS223 with grade of "C" or better.

A continuation of PHS223 that includes

wave motion and sound, electricity and magnetism, and light phenomena.

PHS225 _____ (4-2) 4 cr. hrs.
Modern Physics (spring)

Prerequisites: PHS224 and accompanied by MAT233.

This course includes elements of atomic and nuclear physics, particle interactions, quantum mechanics, special relativity and solid state physics.

PHS230 _____ (3-4) 5 cr. hrs.
Introduction to Organic Chemistry

Prerequisite: A grade of "C" or better in PHS125 or equivalent.

A brief introduction to modern organic chemistry for students interested in agriculture, biology, human or veterinary medicine, pharmacy, nursing, medical technology, health science, home economics, and forestry.

PHS235 _____ (3-6) 5 cr. hrs.
Organic Chemistry I (fall)

Prerequisite: A grade of "C" or better in PHS139 or equivalent.

This is the first half of a two semester course where the theory of the fundamental reactions of organic compounds are studied and practiced. This course is for the student who has chosen chemistry or chemical engineering as a major field of study. It is also for the student who has chosen a field of study such as dentistry, premedicine, or pharmacy, where organic chemistry is a supporting subject. Three lectures and two three-hour labs per week.

PHS236 _____ (3-6) 5 cr. hrs.
Organic Chemistry II (spring)

Prerequisite: A grade of "C" or better in PHS235 or equivalent.

A continuation of PHS235. This is the second half of a two semester course where the theory of the fundamental reactions of organic compounds are studied and practiced. Three (3) lectures and two (2) three-hour labs per week.

PHS240 _____ (4-2) 5 cr. hrs.
Earth Science (with lab)

An introduction to the earth sciences emphasizing the structure, materials, and history of the Earth, its place in the solar system, and the processes that occur in shaping the Earth. Four (4) one-hour lectures and one (1) two-hour laboratory per week.

PHS241 _____ (3-4) 5 cr. hrs.
Physical Geology

An introductory course in geology emphasizing the earth's crust, structures and surficial processes. Included in the course is a laboratory study of common minerals and rocks, topographic and geologic maps. There are three lectures and two two-hour laboratories per week. When field trips are scheduled, the laboratory time may be extended to three hours total.

PHS242 _____ (3-0) 3 cr. hrs.
Earth Science I

An introduction to the earth sciences emphasizing structure, materials, history of the earth, and the processes that occur in shaping the earth and oceanography.

PHS243 _____ (3-0) 3 cr. hrs.
Earth Science II

An introduction to earth sciences emphasizing the atmospheric and astronomical (space) sciences.

PHYSIOLOGY AND HEALTH

PHY112 _____ (2-0) 2 cr. hrs.

School Health

An elementary course dealing with the structure and functions of the human body and the principles of its care. Emphasis is placed on nutrition, chronic and contagious diseases, and reproduction. This course is designed to give students a practical knowledge of personal health care. In addition, the course will benefit students pursuing child-centered careers as children's and adults' health will be a primary focus of the course.

POLITICAL SCIENCE

For students in the Arts & Science Division, the legal requirement in U.S. and state government and the history of American institutions may be met by completing six hours in the following combinations:

1. American History I & II (HIS123 and HIS124 or Honors Section HIS137 and HIS138).
2. American National Government and American State and Local Government (POS113 and POS114).
3. American History I and American National Government or American State and Local Government (HIS123, and POS113 or POS114).
4. American National Government and American History I or II (POS113 and HIS123 or HIS124).

POS113 _____ (3-0) 3 cr. hrs.
American National Government

A survey of the federal government and the American political system with emphasis on the structure, organization and operation of the systems. Fulfills Missouri state law requiring instruction in U.S. and Missouri constitutions. Requirements are listed at the beginning of this section.

POS114 _____ (3-0) 3 cr. hrs.
American State and Local Government

A study of state and local levels of government in the United States with emphasis on the structure and operation of the systems in Missouri. Fulfills Missouri state law requiring instruction in U.S. and Missouri constitutions. Requirements are listed at the beginning of this section.

POS123 _____ (3-0) 3 cr. hrs.
Introduction to Political Science

Prerequisite: One course in Political Science.

Introduction to the scope and content of politics, theory and operation of democratic and nondemocratic governments. Basic concepts and research methods. Recommended for political science majors. Offered on demand.

POS133 _____ (3-0) 3 cr. hrs.
International Relations

A study of the basic forces and principles operating in relations among nations, with particular emphasis upon foreign policy making, international conflicts, international organizations and current international problems. Offered on demand.

POS143 _____ (3-0) 3 cr. hrs.
Comparative Government

A comparison of selected nations representing different forms of government and various stages of development. The political, economic, and social structures of the nations are studied with emphasis on such factors as ideology, industrialization, political parties and leadership. Offered on demand.

POS151 _____ (1-0) 1 cr. hr.**Current Issues**

An examination of current foreign and domestic policy issues, in relation to the policy-making process and public needs of the United States. Special emphasis is placed upon the important relationship between foreign and domestic policies. Students enrolled for one hour credit will meet two hours per week for eight weeks.

POS152 _____ (1-0) 2 cr. hrs.**Current Issues**

An examination of current foreign and domestic policy issues, in relation to the policy-making process and public needs of the United States. Special emphasis is placed upon the important relationship between foreign and domestic policies. Students enrolled for two hours credit will meet for two hours per week for 10 weeks and will be required to do a research paper.

POS161 _____ (3-0) 3 cr. hrs.**Introduction to Public Administration**

This is a basic course that deals with administration in the public sector. It will address the theory of public administration, the fundamentals of governmental budgeting and budget cycle, various governmental organizational structures, the decision-making processes, and some discussion of leadership practices in the public sector. Offered in the evening division.

PSYCHOLOGY**PSY001** _____ (Arr.) 1 cr. hr.**Introductory Psychology I**

Recommended as preparation for regular Psychology classes. Offered as self-paced and/or independent study module through the Learning Center. Does not apply toward an AA degree.

PSY002 _____ (Arr.) 1 cr. hr.**Introductory Psychology II**

Continuation of Psychology modules. Offered as a self-paced and/or independent study module through the Learning Center. Does not apply toward an AA degree.

PSY003 _____ (Arr.) 1 cr. hr.**Introductory Psychology III**

Continuation of Psychology modules. Offered as self-paced and/or independent study module through the Learning Center. Does not apply toward an AA degree.

PSY113 _____ (3-0) 3 cr. hrs.**General Psychology I**

A broad overview of the general field of psychology and fundamental principles of human behavior is provided in this course. Includes topics such as the biology of behavior, learning and memory, emotion and motivation, growth and development, individual personality, psychopathology, and treatment of mental illness.

PSY114 _____ (3-0) 3 cr. hrs.**General Psychology II**

Prerequisite: PSY113.
A more intensive examination of the principles and theories of human behavior studied in General Psychology I. Course topics cover a broad spectrum of interest areas in psychology to help the student bridge the gap between principles, theories and the real world. Emphasis is placed on developing advanced knowledge and skills of scientific analysis, library research and clarity of scientific writing.

PSY116 _____ (3-0) 3 cr. hrs.**Applied Psychology**

Introduction to the applications of psychology to human behavior in real-life situations with emphasis on problems of daily living. Topics include perception, learning, memory, development, motivation, adjustment, human relations, communication, group dynamics, and career planning.

PSY125 _____ (3-0) 3 cr. hrs.**Human Growth and Development**

This course provides the student with a lifespan approach to development. The course examines major psychological issues, theories, and research concerning infancy, childhood, adolescence, and adulthood. Influences on physical, cognitive, personality, and social development are analyzed.

PSY200 _____ (3-0) 3 cr. hrs.**Abnormal Psychology**

Prerequisite: PSY113.
A survey of various psychological disorders, including their signs, symptoms, causes, and treatment, as well as the theoretical perspectives through which these disorders are viewed. Legal and ethical issues are also discussed along with other controversial topics in the field.

SOCIOLOGY**SOC113** _____ (3-0) 3 cr. hrs.**General Sociology**

This introductory course provides an overview of the fundamental concepts and basic principles in sociology; investigating social structures and interaction patterns, culture, institutions, social change, and global trends.

SOC123 _____ (3-0) 3 cr. hrs.**Social Problems (spring)**

A course designed to look at specific areas of major American social problems. Proposed problems to be studied include: drugs, crime and delinquency, mental disorders, sexual behavior, race relations, family problems, poverty, war and peace.

SOC124 _____ (3-0) 3 cr. hrs.**Substance Abuse in Modern Society**

Prerequisite: PSY113 or SOC113.
An overview of the drug problems in America and its institutions. Included will be an explanation of drug actions within the human body and frequently observed manifestations of drug dependency and usage as well as the study of drug abuse prevention programs.

SOC154 _____ (3-0) 3 cr. hrs.**Introduction to Cultural Anthropology**

This course is an introduction to the study of human cultures which aims to demonstrate how the basic concepts and techniques developed by anthropologists help us understand societies of various degrees of complexity. Major goals are increased awareness of the diversity and flexibility of human cultures through a comparison of marriage and family, economic, political, religious and language systems. (Cultural diversity course.)

SOC160 _____ (3-0) 3 cr. hrs.**Ethnicity and Cultural Differences in America**

This course is an in-depth exploration of American ethnic, racial and subcultural diversity with a focus on the social dynamics and consequences of cultural differences. Integrates knowledge about lifestyles and needs of different groups and their contributions to the American way of life. Includes topics on ethnic relations, the Anglo-Saxon concept, African Americans, Native Americans,

Latinos, Asian Americans, as well as Gay and Lesbian lifestyles, the Amish, and cultural variance between the West coast and the Old South. This course meets the cultural diversity requirement. (Cultural diversity course.)

SOC162 _____ (3-0) 3 cr. hrs.**Human Diversity**

This course is designed to promote better understanding and appreciation of human differences through comparison of diverse populations based on value systems, cultural and ethnic influences, communication styles, socioeconomic factors, health risks, disabilities, life stages and other types of diversity. Content provides a multidisciplinary knowledge base and perspectives that include the study of cultural factors that influence human behavior and relationships to help the student interact more effectively and sensitively with people from diverse backgrounds. (Cultural diversity course.)

TECHNOLOGY**TEC100** _____ (Arr.) 6 cr. hrs.**Machine Shop I**

An introduction to basic machine tool technology. Includes safety practices, elementary blueprint reading, layout and bench work, and an introduction to the use of machine tools.

TEC102 _____ (1-0) 1 cr. hr.**Introduction to Technology**

A survey course designed to orient students to the various areas of specialization in the field of technology.

TEC104 _____ (3-0) 3 cr. hrs.**Technical Writing**

Prerequisite: ENG133 or ENG097.
Report writing for students majoring in technology. The primary purpose is to have each student learn to prepare clear, concise, complete engineering reports, including the necessary graphs, tables, and written material.

TEC107 _____ (4-Arr) 4 cr. hrs.**Unified Technical Concepts I**

Prerequisite: Enrollment in TEC190.
A flexible, modular, integrated approach to teaching the traditional Technical or Applied Physics course. A central core emphasizes both the analogies between basic physical principles and the applications of these principles in modern technology. Emphasis is on mechanical, fluidal, electrical and thermal systems.

TEC108 _____ (4-Arr.) 4 cr. hrs.**Unified Technical Concepts II**

Prerequisites: TEC190, TEC107 or consent of instructor.
A continuation of Unified Technical Concepts I, using a flexible, integrated modular approach to Technical Physics. Emphasis is on energy systems, wave vibration, and optics.

TEC110 _____ (Arr.) 3 cr. hrs.**Technical Internship**

Prerequisites: Consent of instructor, sophomore standing, GPA of 2.5 and credit or enrollment in PAW106.

Supervised occupational experience in local business, municipal and governmental agencies.

TEC116 _____ (Arr.) 6 cr. hrs.**Machine Shop II**

Prerequisite: TEC100.
A continuation of TEC100 involving greater depth in the use of grinders, drill presses, lathes, milling machines, and shapers. This course is offered by Mineral Area College at the UniTec Career Center.

DESCRIPTION : TEC**TEC120 _____ (3-0) 3 cr. hrs.****Architectural Design and Drafting**

Prerequisite: TEC130 or consent of instructor.

The design and development of working drawings for architectural and industrial facilities. Topics included are: materials, structures, specifications, aesthetics, construction principles, developing models, cost estimating and building codes.

TEC122 _____ (3-0) 3 cr. hrs.**Mechanical Design and Drafting**

Prerequisite: Enrollment in TEC130 or consent of instructor.

The graphic representation of piping, plumbing, electrical, heating, ventilating, and air conditioning systems.

TEC126 _____ (3-0) 3 cr. hrs.**Topographic and Map Drafting**

Prerequisite: TEC130.

The methods of plotting maps, showing horizontal and vertical control and practice inputting field data into graphic form.

TEC130 _____ (3-0) 3 cr. hrs.**Computer Aided Design/Drafting**

A self-paced course devoted to learning the basic operation of a microcomputer based CAD/D system. Fundamentals of system operation and commands will be stressed.

TEC132 _____ (3-0) 3 cr. hrs.**Advanced Computer Aided Design/Drafting**

Prerequisite: TEC130 or consent of instructor.

A continuation of TEC130, with emphasis on development of complex drawings for different engineering specialties.

TEC133 _____ (3-0) 3 cr. hrs.**CAD/D — Special Problems**

Prerequisite: TEC130 or consent of instructor.

A continuation of TEC132, with emphasis on problems selected from aerospace, architectural, mechanical, electrical, piping, or structural, or technical illustration.

TEC135 _____ (3-0) 3 cr. hrs.**Introduction to Robotics**

A general course that provides an historical perspective of the use and development of robotics within the context of productivity, safety and emerging commercial applications. The experience and knowledge gained through study and participation in the field of robotics will give the student a basic background of the industrial robot which is essential in today's industrial world of high technology.

TEC137 _____ (3-0) 3 cr. hrs.**Basic Computer Programming for Technicians**

An introductory course to microcomputer applications for the student entering any of the Technology fields. Emphasis will be placed on using microcomputer programs to solve engineering problems.

TEC139 _____ (Arr.) 6 cr. hrs.**Machine Shop III**

Prerequisites: TEC100 and TEC116.

A study of advanced machine tool operations with special emphasis on project planning and quality and quantity management. This course is offered by Mineral Area College at UniTec Career Center.

TEC140 _____ (5-0) 5 cr. hrs.**Machine Design**

Prerequisites: TEC176.

The theory of designing mechanical components to safely and effectively transmit

force and motion. Units of study include basic stresses, combined stress, deflection, impact, column effect, and fatigue.

TEC143 _____ (Arr.) 6 cr. hrs.**Machine Shop IV**

Prerequisites: TEC100, TEC116, and TEC139.

An application of the skills gained in the previous courses in planning, implementing, and executing a complete class production project. This course is offered by Mineral Area College at UniTec Career Center.

TEC149 _____ (1-0) 1 cr. hr.**Survey Writing Skills and Legal Problems**

The course is designed to enhance writing skills on survey boundary descriptions and the legal knowledge of surveyors regarding applicable property law. The benefits realized from the course will be better communication between surveyors and attorneys, writing that is more concise and understandable, and improved surveyor knowledge of the evolving property law affecting their profession.

TEC150 _____ (3-0) 3 cr. hrs.**Plant Layout**

A study of the techniques used to develop efficient arrangement of men, materials, and machines in industrial and commercial buildings. The course of study includes the nature of plant layout, factors influencing plant layout and how to plan the layout emphasis.

TEC152 _____ (3-0) 3 cr. hrs.**Construction Methods and Estimating**

An introduction to the methods of construction and the estimating of quantities and cost of architectural and aluminum, plastic, concrete, and wood.

TEC153 _____ (3-0) 3 cr. hrs.**Three-Dimensional Modeling-CADD**

Prerequisite: TEC130 and TEC 132.

A self-paced course devoted to learning Three-Dimensional drafting and design based on computer CADD/D system. Emphasis will be on wireframe and solid entity design.

TEC154 _____ (3-0) 3 cr. hrs.**Surveying I**

An introduction to plane surveying with emphasis on field work including use of instruments and note taking. Necessary computations for mathematically checking results, accuracy and appearance are stressed.

TEC155 _____ (3-0) 3 cr. hrs.**Surveying II**

Prerequisite: TEC154 or consent of instructor.

A continuation of TEC154 with emphasis on route surveying. Computation of simple and complex horizontal and vertical curves, earthwork calculations and design criteria for both highway and rail design are studied.

TEC156 _____ (3-0) 3 cr. hrs.**Manufacturing Process and Estimating**

A study to emphasize the principles of manufacturing processes and their efficient utilization as applied to engineering products. Course content includes: metals, foundry processes, plastics, metalworking processes, measurement and inspection, welding and economics of process planning.

TEC157 _____ (2-0) 2 cr. hrs.**Legal Aspects of Surveying and Land Boundaries**

Development of the legal principles pertaining to creation, modification and establishment of land boundaries, review of legal responsibilities, rights and liabilities of surveyors, and

review of real estate property law pertaining to surveying in general.

TEC158 _____ (3-0) 3 cr. hrs.**Quality Control and Testing Fundamentals**

A study of the principles used to insure a good quality product and an introduction to basic laboratory equipment procedures. Course content includes: simple quality control and inspection tests, types of quality control systems, sampling plans, organizations aspects and reliability study.

TEC159 _____ (2-0) 2 cr. hrs.**Legal Principles and Roles in Surveying**

This course is designed to enhance knowledge of a surveyor's role in court and a legal update on applicable boundary/property law. The benefits realized from the course will be better communication between surveyors and attorneys, better court performance for surveyors, and improved surveyor knowledge of the evolving boundary and property law affecting their profession in Missouri.

TEC160 _____ (3-0) 3 cr. hrs.**Materials Analysis**

The study of the properties of engineering materials and the means to obtain measures of those properties by analysis and testing. Materials tested include: steel, aluminum, plastic, concrete, and wood.

TEC162 _____ (3-0) 3 cr. hrs.**Soils Analysis**

A study of soils as an engineering material, including problem solving in the effects of moisture content, density, water flow, and adjacent soil pressures.

TEC164 _____ (3-0) 3 cr. hrs.**Environmental Analysis**

The course is designed primarily for the Civil Technician who is interested in learning the problems and methods of dealing with water pollution, air pollution, solid waste disposal, and sewage treatment. Instruction shall consist of causes of pollution, proper design of equipment used (both preventative and corrective), and methods of laboratory testing.

TEC167 _____ (3-0) 3 cr. hrs.**Design & Development I**

This course introduces students to design and development of a product needed to solve a problem. The student, working in design teams, will be required to use critical thinking to design a component from perception through to a working prototype in order to prove out the solution. Students are asked to work from a set design specifications to develop a design approach, building a working prototype, test to the design parameters, write a report, and give a presentation to a review board. The report must include enough detail to produce the solution.

TEC169 _____ (3-0) 3 cr. hrs.**Introduction to Geographic Information Systems**

Prerequisite: CIS105 or higher.

This course introduces students to the tools and techniques of GIS including spatial data capture, management and analysis, as well as cartographic output through hands-on experience using GIS software. Emphasis is placed on training in the use of technology and software in order to provide students with skills and a conceptual base on which they can build further expertise in GIS.

TEC172 _____ (3-0) 3 cr. hrs.**Mechanisms**

Prerequisite: TEC190 or consent of instructor.

A course in utilizing sources of applying power transmission principles to basic mechanical components, fundamental rotary motion and linear and angular displacements are studied.

TEC173 _____ (1-0) 1 cr. hr.
Problem Analysis

A comprehensive study of the use and capabilities of the scientific calculator. Areas of emphasis will be to introduce the student to new concepts or techniques followed by examples in problem solving.

TEC174 _____ (3-0) 3 cr. hrs.
Mechanical and Electrical Systems

A course providing the necessary theory for designing piping, plumbing, heating, ventilating, air conditioning, and electrical systems. Various code requirements, as well as engineering and industrial standards, are presented. Conventional equipment, fixtures, materials, controls and workmanship are discussed in relation to costing and specifications.

TEC176 _____ (5-0) 5 cr. hrs.
Mechanics and Strength of Materials

A study of structural engineering bodies that have external applied loads and determining the internal load distribution. Problem solving will be in the areas of loads, internal force, internal deformations and sizing of structures.

TEC177 _____ (3-0) 3 cr. hrs.
Computer Numerical Control (CNC)

Prerequisite: TEC116 or consent of instructor.

An introductory course in CNC programming. The student will learn to create manual part programs for a small lathe and milling machine equipped with CNC controller, use proper coding, acceptable machine practices and programming techniques.

TEC178 _____ (3-0) 3 cr. hrs.
Blueprint Reading

A first year core course for all Technology students. Students will learn to interpret mechanical, civil, structural, plumbing, architectural and electrical/electronic schematic drawings. The ability to take off dimensions and part quantities will be stressed.

TEC179 _____ (3-0) 3 cr. hrs.
Basic Numerical Control Programming

The course will cover good N/C machining practices, definition of geometric entities and continuous path programming techniques, such as macros and looping, using the APT language, enabling the student to prepare simple 3 axis N/C part programs.

TEC180 _____ (3-0) 3 cr. hrs.
Advanced Numerical Control Programming

Prerequisite: TEC 177 and TEC179.

The course will build on material learned in TEC179 to more advanced definitions and topics such as ruled surfaces, matrices and programming techniques needed to create N/C programs in the APT language for complex parts to be manufactured on 3, 4, and 5 axis N/C machines.

TEC181 _____ (2-0) 2 cr. hrs.
N/C Planning and Tooling

Prerequisites: TEC100 and TEC179 or consent of instructor.

An introductory course for machine tool option majors to learn the pre-plan flow of N/C operations necessary to the programming of complex parts. In addition the student will be introduced to tooling concepts pertaining specifically to N/C manufactured parts.

TEC190 _____ (3-0) 3 cr. hrs.
Technical Mathematics I

Prerequisites: ACT Math score of at least 13. A Compass Algebra score of 16-30. A grade of "C" or better in MAT 090 or LC Modules MAT002, MAT003, MAT004.

College mathematics for students majoring in technology. The course of study includes calculator applications, algebra, geometry, graphical methods and trigonometry.

TEC191 _____ (3-0) 3 cr. hrs.
Technical Mathematics II

Prerequisite: TEC190.

A continuation of TEC190. The major topics are: advanced algebra, exponents, radicals, logarithms, oblique and analytical trigonometry.

TEC203 _____ (3-0) 3 cr. hrs.
Basic Fluid Power

The study of science in transmitting force and/or motion through the medium of a confined fluid. Emphasis will be in gaining technical knowledge about the design application and use of fluids as power-transmission agents.

TEC204 _____ (3-0) 3 cr. hrs.
Introduction to Process Control

This course teaches the basic principles of process automation and demonstrates the application of these principles in modern industrial practice. This is an introductory or first level course. The course is intended to be both theoretical and practical to show the basic concepts of process control theory and how these concepts are used in daily practice.

TEC212 _____ (Arr.) 3 cr. hrs.
Technical Internship II

Prerequisite: TEC110 with a grade of "C" or better.

A supervised occupational experience with local business. Students shall perform 90 hours of on-the-job training under the direction of a qualified supervisor in the location approved by instructor. This course is required for all Associate of Applied Science degrees with respect to the following majors: Automotive Collision Technology, Automotive Technology, Construction/Building Technology, Graphic Arts/Printing Technology, Heating, Air Conditioning & Refrigeration Technology and Welding Technology.

THEATRE

THE100 _____ (3-0) 3 cr. hrs.
Introduction to Theater

A course designed to give a comprehensive introduction to the art of theater by examining the roles and contributions of theater artists including the actor, the director, the designers, the playwright, and the critic. Students will develop projects in these areas and attend theatre productions.

THE104 _____ (3-0) 3 cr. hrs.
Beginning Acting

Methods of improving vocal and physical skills for performance. Students receive training in voice, movement, characterization, and play analysis. Theater games, improvisations, and short dramatic scenes are emphasized.

THE108 _____ (3-0) 3 cr. hrs.
Children's Theatre (Creative Drama)

A performance and study based class, students will review the history and purpose of creative dramatics in the school. Students will rehearse and perform one-act plays at area elementary schools. Students must be available to tour Tuesday and Thursday afternoons from 12-4 p.m. for the final eight weeks of the semester. The class is open to all students.

THE110 _____ (Arr.) 1 cr. hr.
Directed Studies in Theater Arts

Supervised study in the varied aspects of the theater under the direct supervision of the Theatre Director or Technical Director in conjunction with Mineral Area College's theatrical productions. This study may include acting, directing, costuming, make-up, scenic design and construction, stage lighting, and management. A maximum of six credit hours may be applied towards graduation if the course is repeated. Open to all students.

THE112 _____ (3-0) 3 cr. hrs.

Stagecraft

Instruction in and operation of equipment used in technical theater. Areas include scenery, lighting, sound, properties and make-up. Lecture, demonstration and hands-on lab experience. Open to all students.

THE120 _____ (3-0) 3 cr. hrs.
Introduction to Literature: Drama

An analysis of dramatic form through the study of representative genres of theater to aid student development of critical capabilities for reading drama. Tragedy, comedy, tragicomedy, farce, melodrama, musicals, absurdism and other styles will be studied using specific scripts, as well as the cultures that gave rise to these movements. This is a reading intensive course.

THE200 _____ (3-0) 3 cr. hrs.
Voice and Diction

Students will be instructed in proper articulation, projection, breath control and emotional voice manipulation. Students will be instructed in techniques for the stage, radio, television, film, the classroom and lecture hall. Dialect use and correction will be part of the class as well. Lecture class presentations. Open to all students.

THE204 _____ (3-0) 3 cr. hrs.
Acting II

Character development, script analysis, and commitment to the role will be the class focus. Concentration will be on a short scene and monologue work and critical studies of acting performances on video tape and film. Open to all students.

THE206 _____ (3-0) 3 cr. hrs.
Playwriting

A writing intensive course designed to enhance a student's ability to communicate through dialogue. Students will study excerpts from scripts, create new material and analyze each other's work. The 10-minute play and one-act formats will be used.

THE212 _____ (3-0) 3 cr. hrs.
World Drama

The primary purpose of this course is to help the student understand and appreciate the dramatic form through the study of representative plays through theatrical history—from the Greeks, Medieval, Renaissance, Early European, Modern British and American Drama. Classes are discussion oriented and the play script is emphasized as a means to dramatic productions. This is a reading intensive course. This courses meets the cultural diversity requirement. (Cultural diversity course.)